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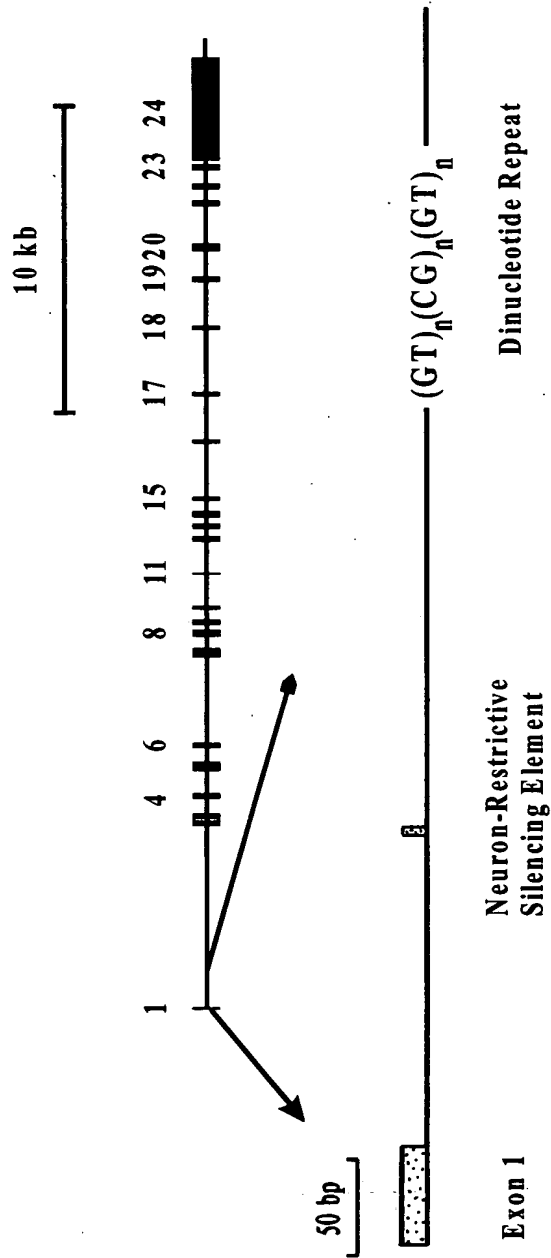


FIG. 40

# **Sequence of the hKCC2 dinucleotide repeat in several individuals:**

## **Sample 1:**

Allele A (GT)<sub>18</sub> (GC)<sub>7</sub> (AT)<sub>1</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>11</sub> / Total = 84

Allele B (GT)<sub>16</sub> (GC)<sub>5</sub> (AT)<sub>1</sub> (GT)<sub>5</sub> (GC)<sub>1</sub> (GT)<sub>9</sub> / Total = 74

## **Sample 2:**

Allele A (GT)<sub>18</sub> (GC)<sub>4</sub> (AT)<sub>2</sub> (GT)<sub>4</sub> (GC)<sub>2</sub> (GT)<sub>11</sub> / Total = 82

## **Sample 3:**

Allele A (GT)<sub>16</sub> (GC)<sub>6</sub> (AT)<sub>1</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>11</sub> / Total = 78

Allele B (GT)<sub>14</sub> (GC)<sub>5</sub> (AT)<sub>1</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>11</sub> / Total = 72

## **Sample 4:**

Allele A (GT)<sub>19</sub> (GC)<sub>6</sub> (AT)<sub>2</sub> (GT)<sub>4</sub> (GC)<sub>2</sub> (GT)<sub>10</sub> / Total = 86

Allele B (GT)<sub>17</sub> (GC)<sub>7</sub> (AT)<sub>2</sub> (GT)<sub>4</sub> (GC)<sub>2</sub> (GT)<sub>10</sub> / Total = 84

## **Sample 5:**

Allele A (GT)<sub>17</sub> (GC)<sub>6</sub> (AT)<sub>2</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>10</sub> / Total = 80

Allele B (GT)<sub>16</sub> (GC)<sub>6</sub> (AT)<sub>2</sub> (GT)<sub>3</sub> (GC)<sub>2</sub> (GT)<sub>10</sub> / Total = 78

## **Sample 6:**

Allele A (GT)<sub>15</sub> (GC)<sub>6</sub> (AT)<sub>1</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>11</sub> / Total = 76

Allele B (GT)<sub>16</sub> (GC)<sub>5</sub> (GT)<sub>1</sub> (AT)<sub>1</sub> (GT)<sub>4</sub> (GC)<sub>1</sub> (GT)<sub>11</sub> / Total = 78

## **Sample 7:**

Allele A (GT)<sub>16</sub> (GC)<sub>4</sub> (GT)<sub>1</sub> (AT)<sub>1</sub> (GT)<sub>5</sub> (GC)<sub>1</sub> (GT)<sub>10</sub> / Total = 76

**FIG. 41**

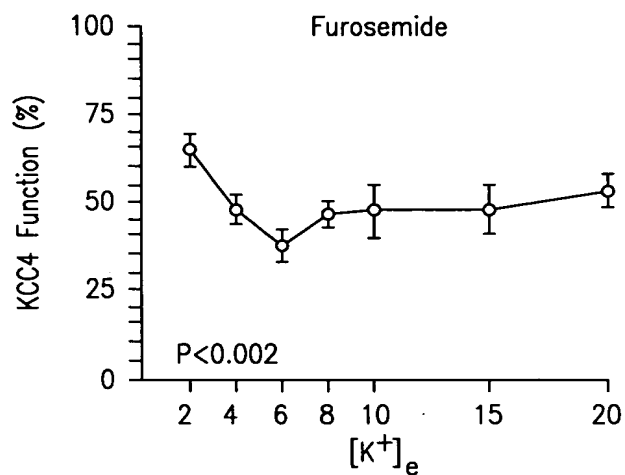


FIG. 14A

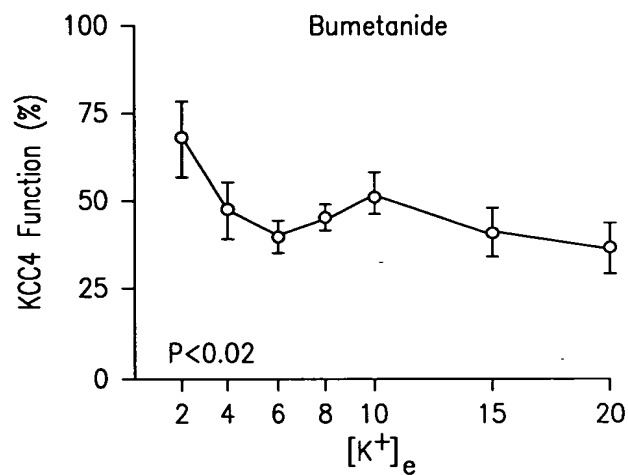


FIG. 14B

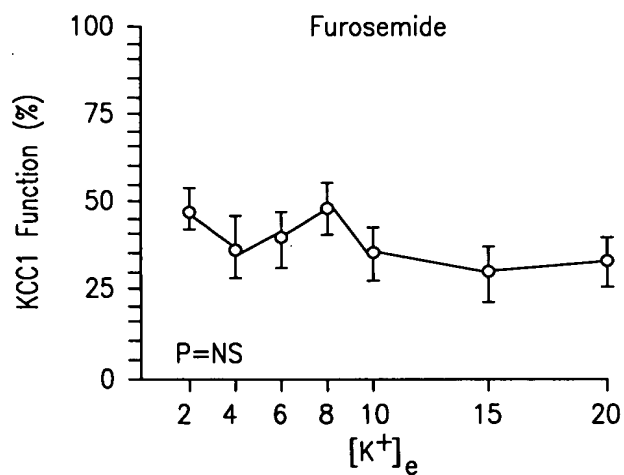


FIG. 14C

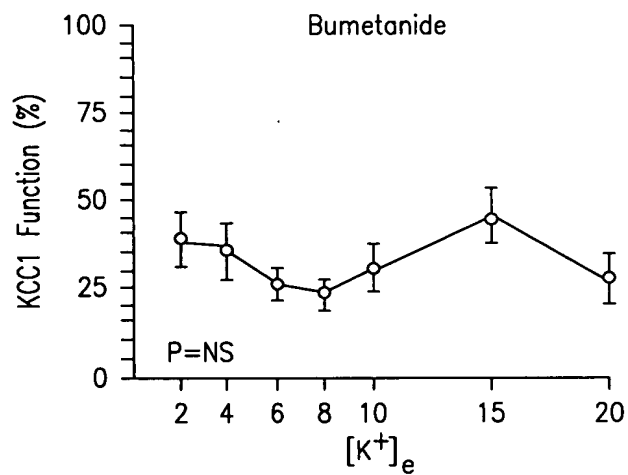


FIG. 14D

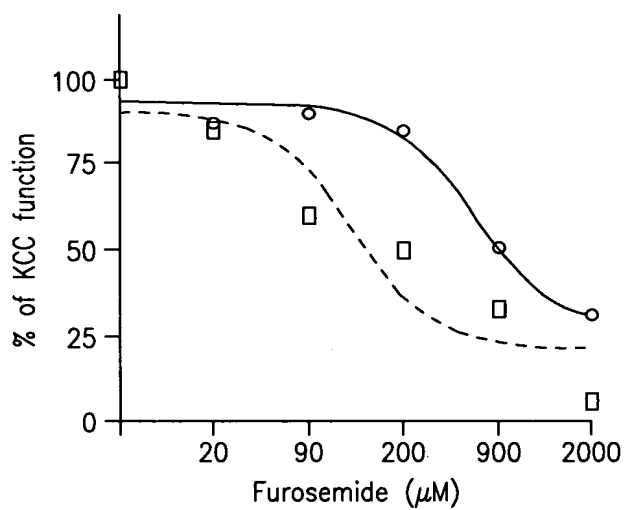


FIG. 15A

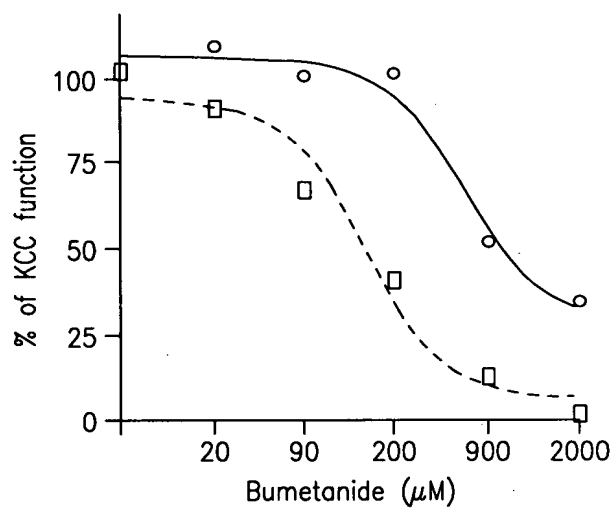


FIG. 15B

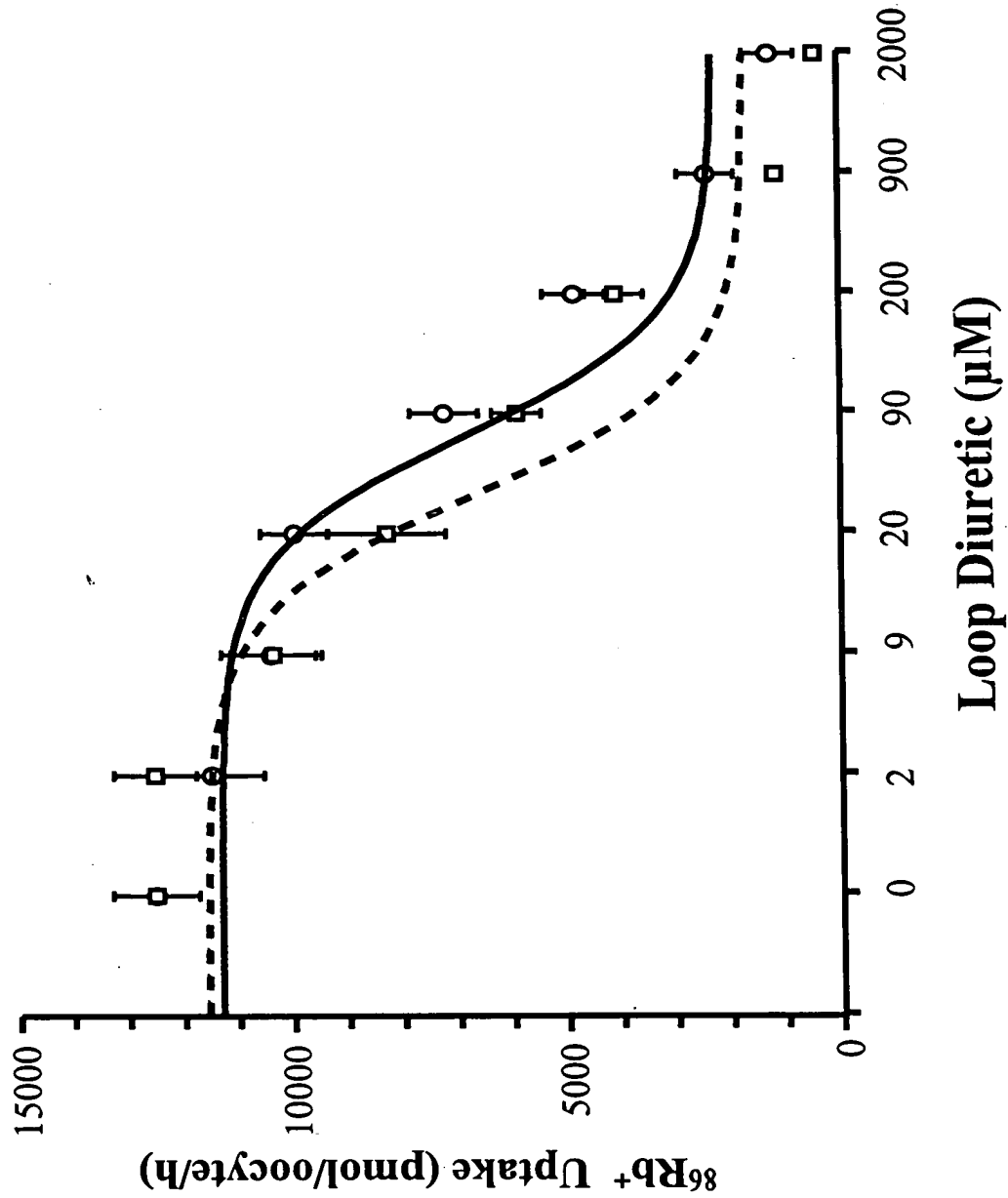
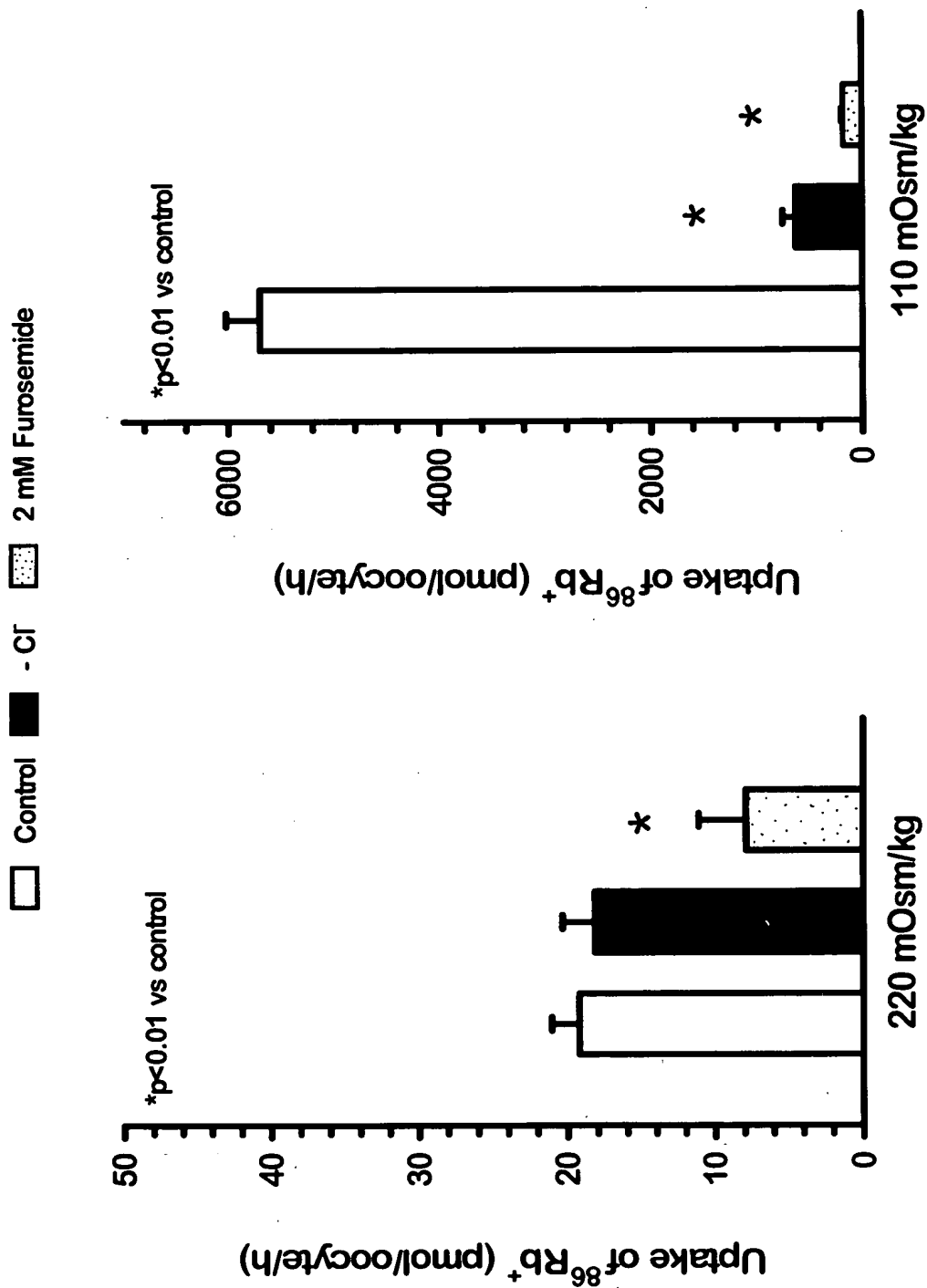


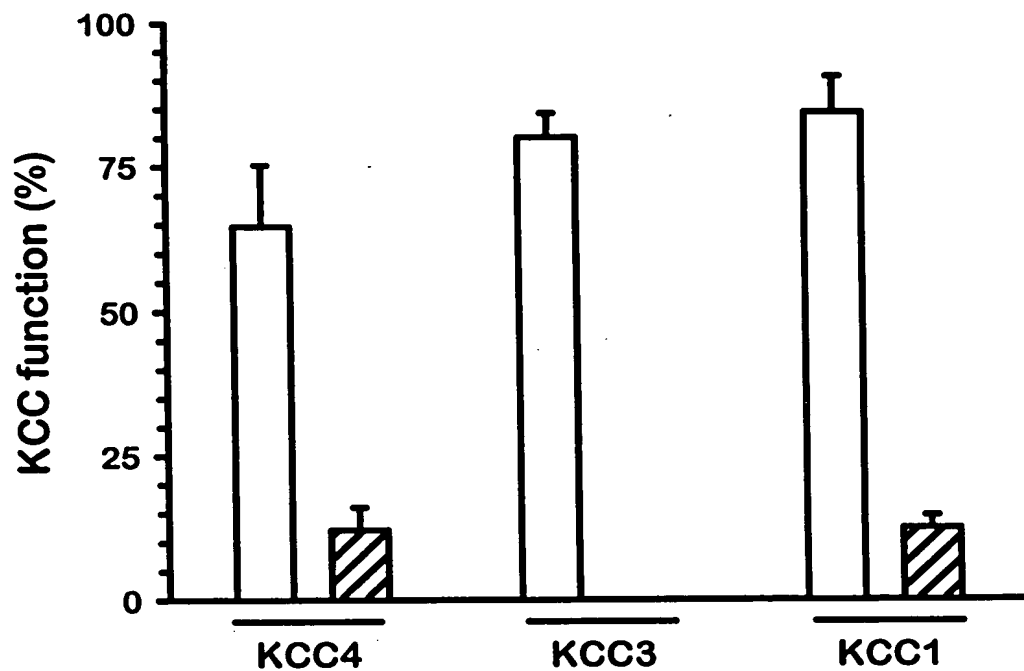
FIG. 16



Extracellular Osmolarity

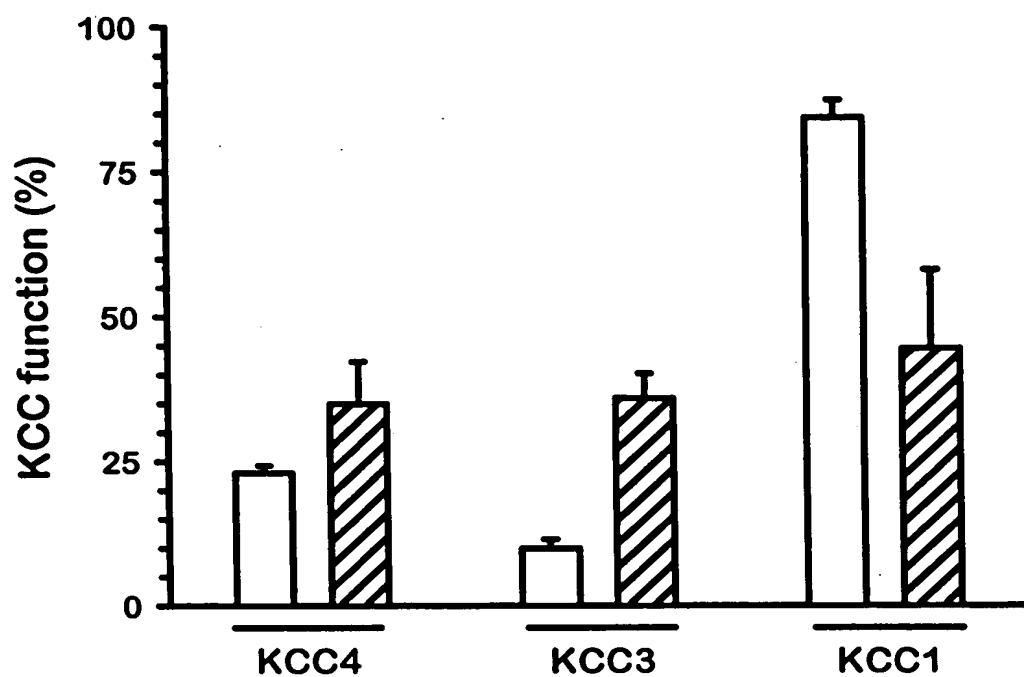
FIG. 17

**DIDS (100  $\mu$ M)**



**FIG. 18A**

**DIOA (100  $\mu$ M)**



**FIG. 18B**



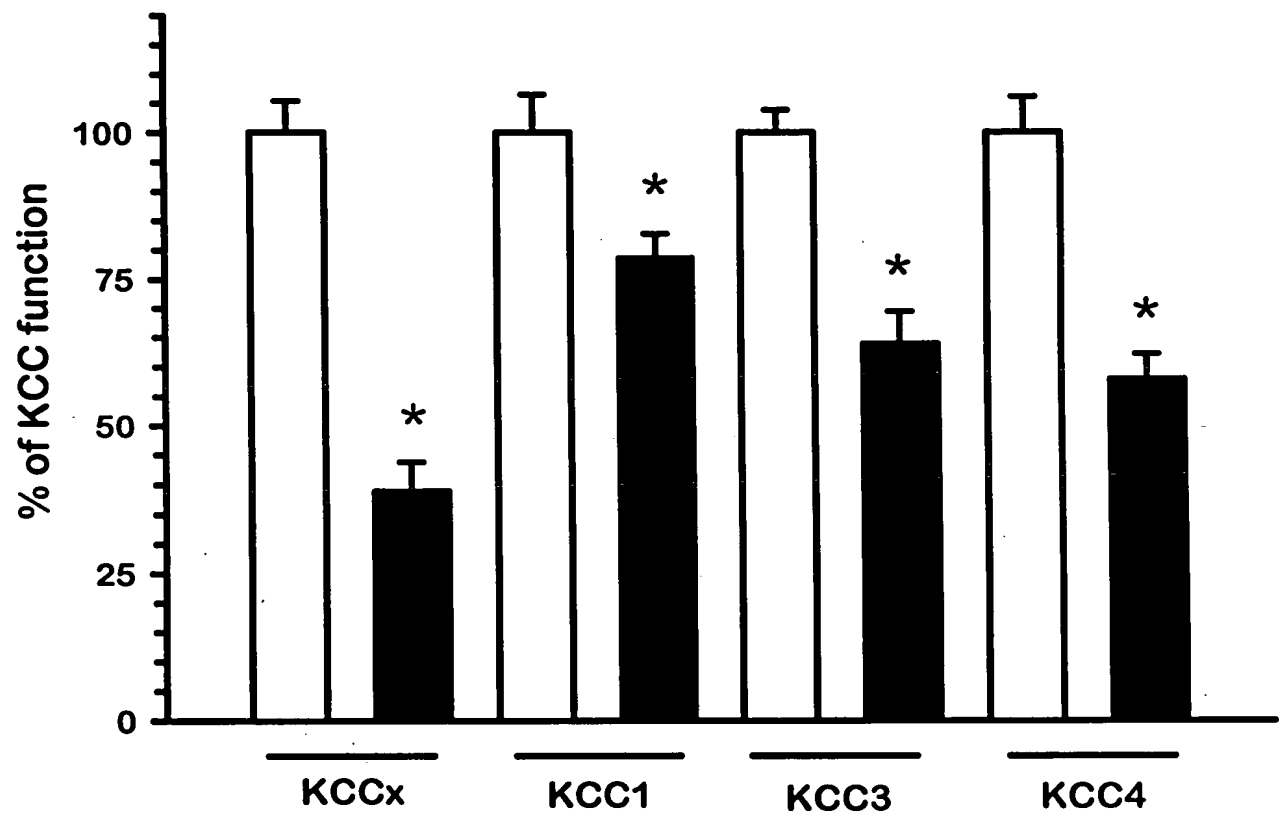


FIG. 19

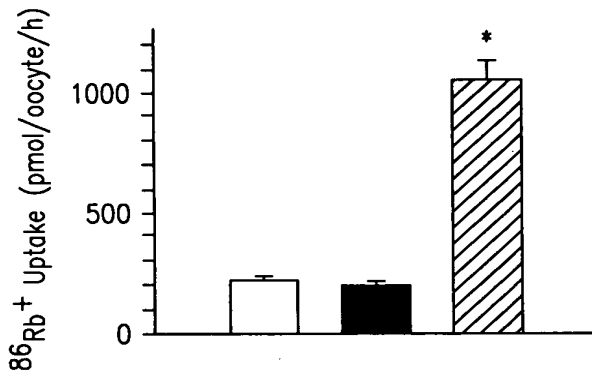


FIG. 20A

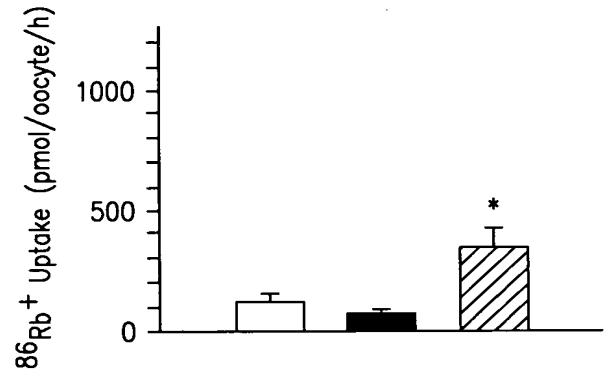


FIG. 20B

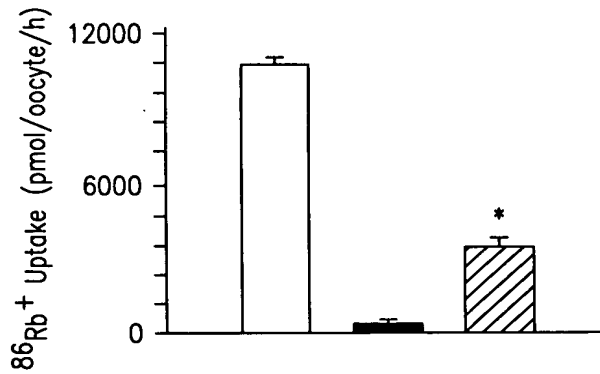


FIG. 20C

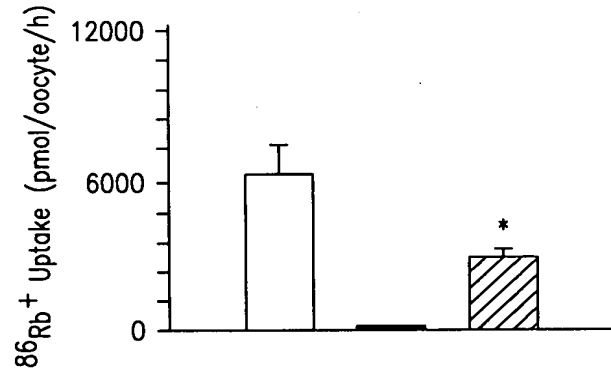
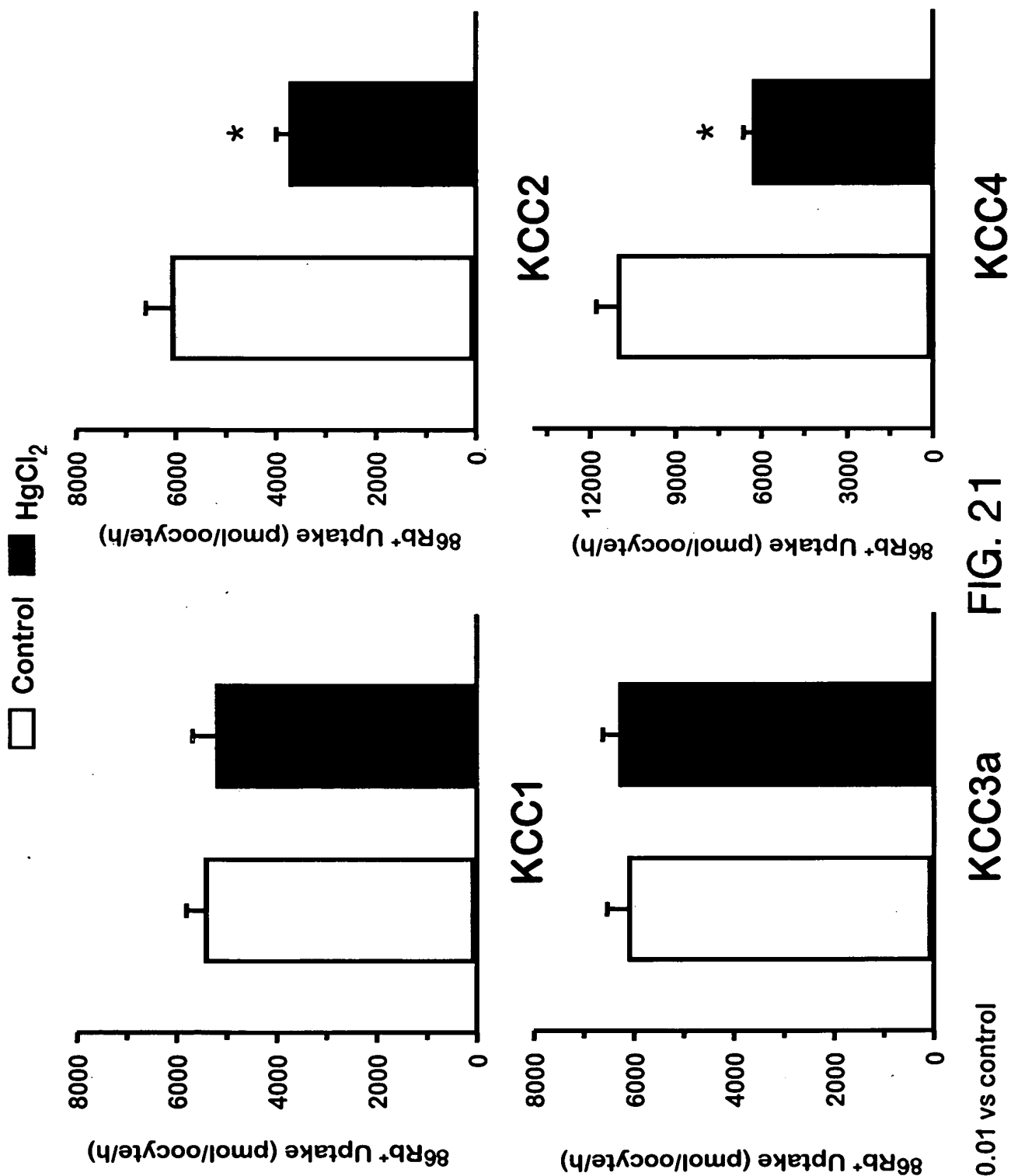


FIG. 20D



\*p<0.01 vs control

FIG. 21

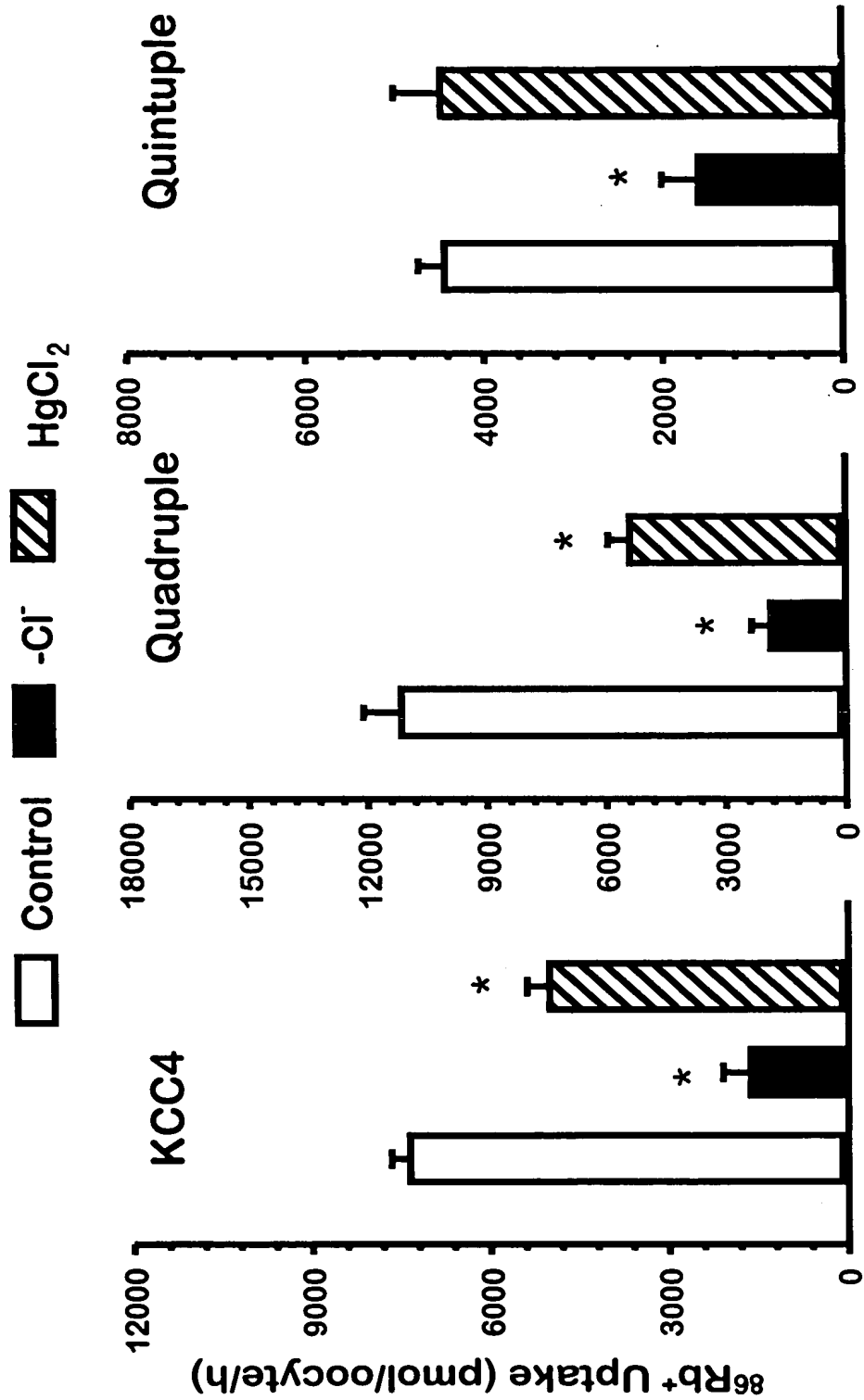


FIG. 22

\* $p < 0.01$  vs control

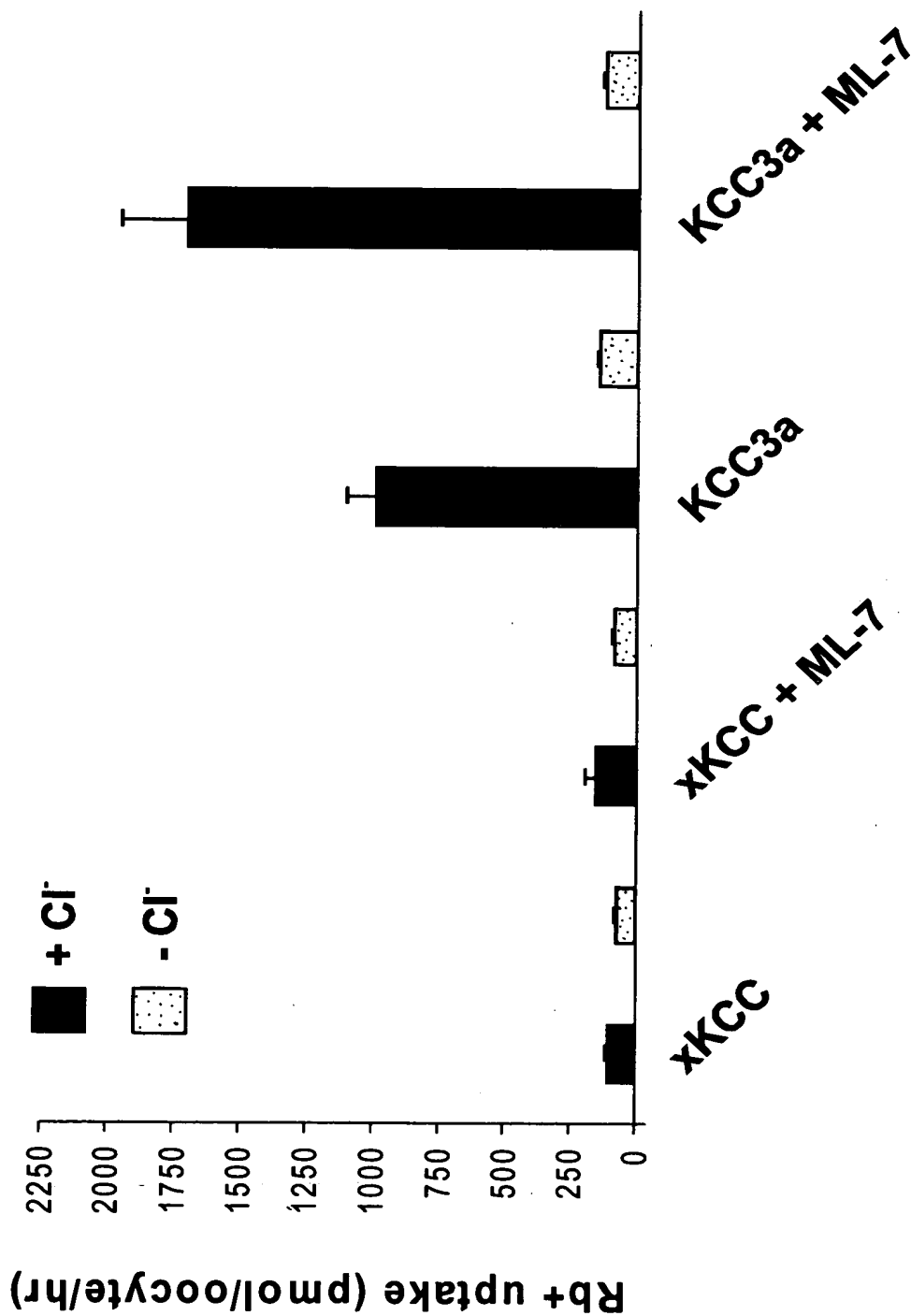


FIG. 23

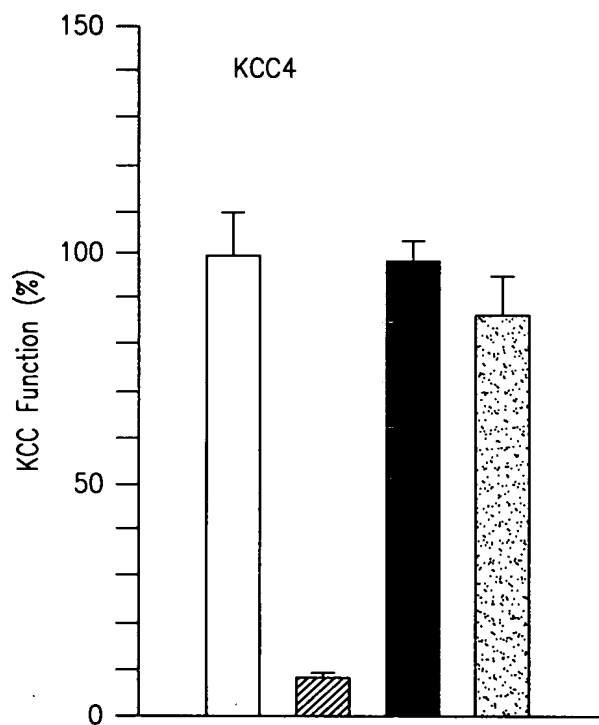


FIG. 24A

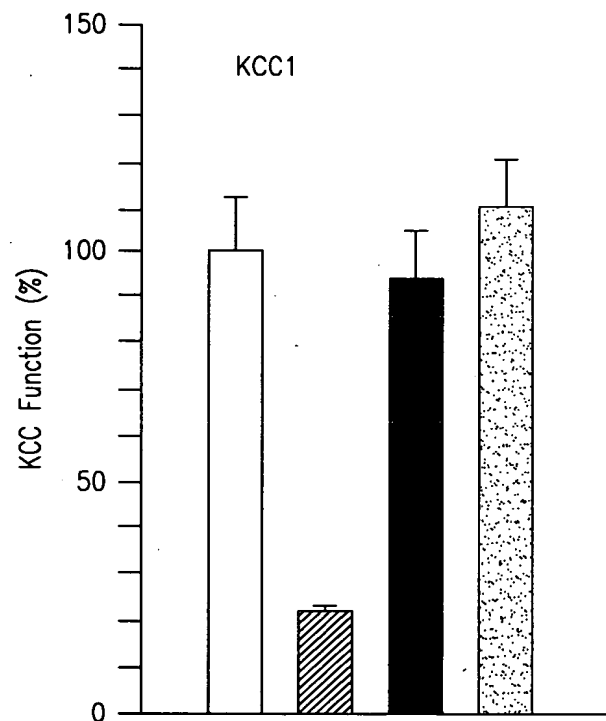


FIG. 24B

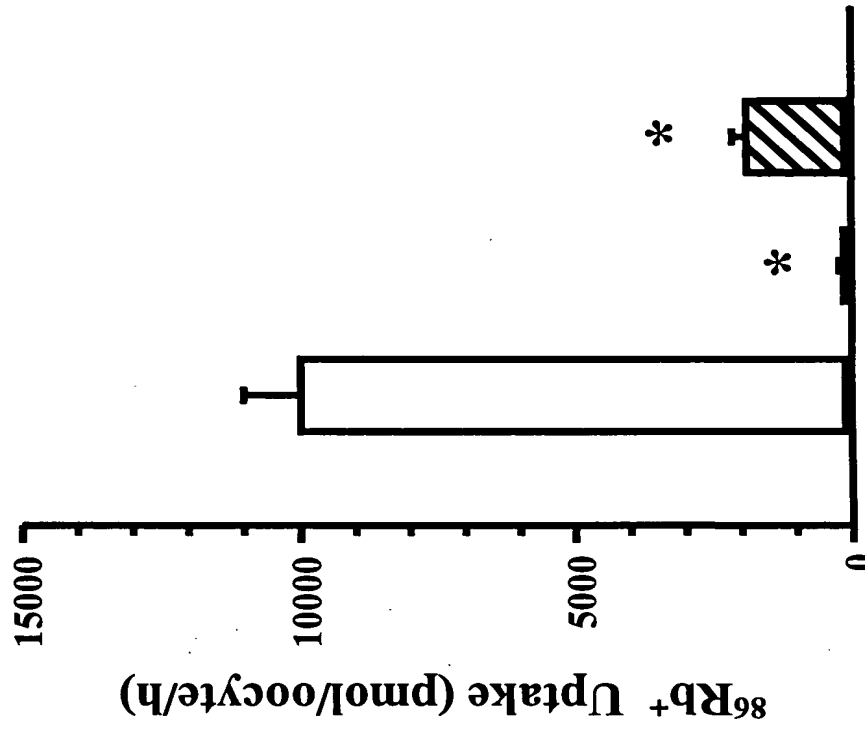


FIG. 25B

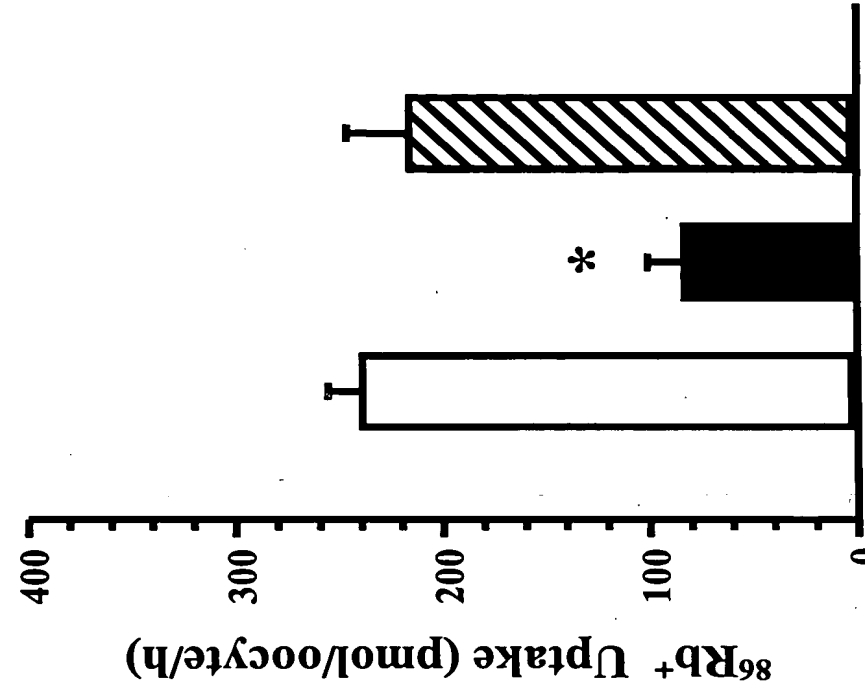
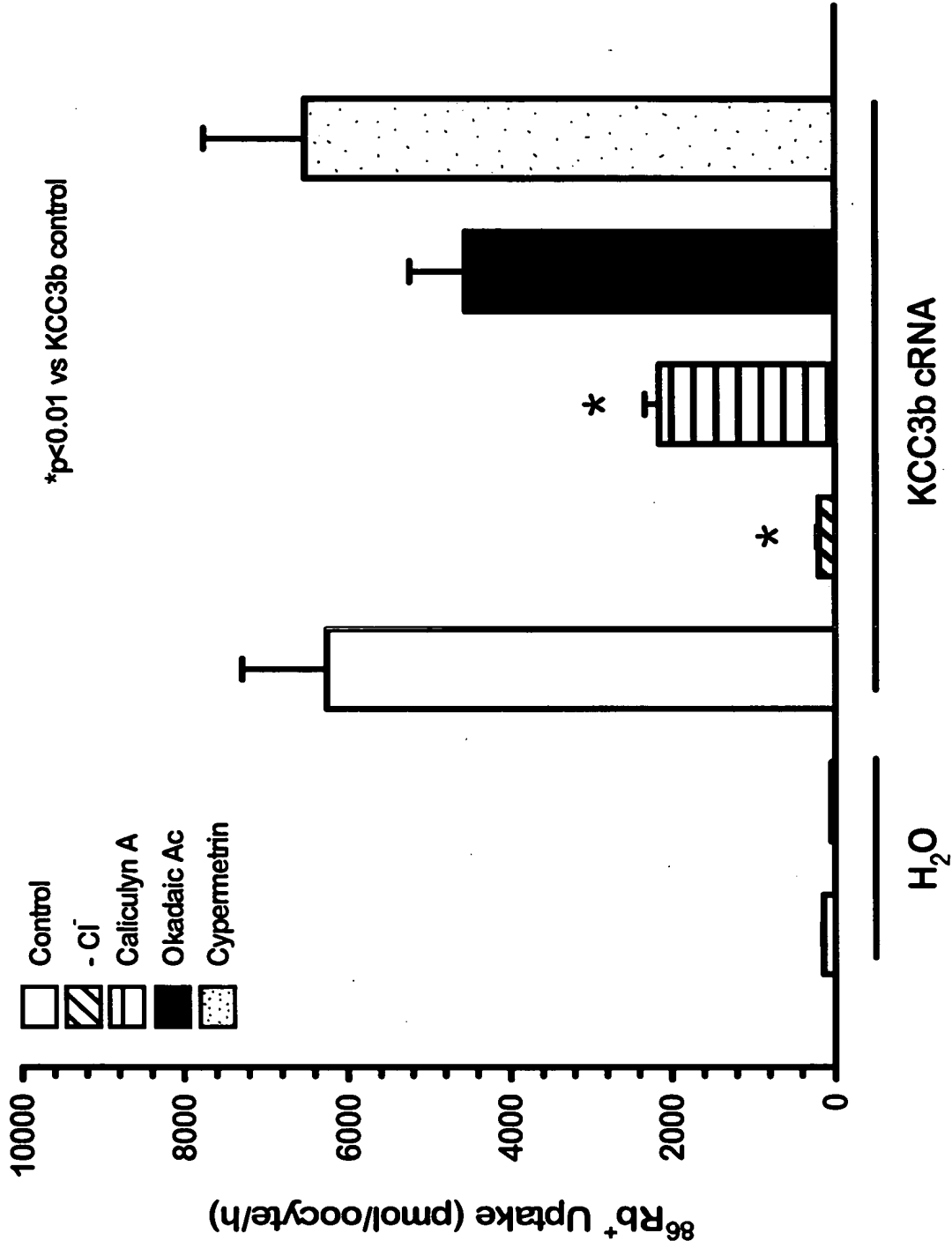


FIG. 25A



**FIG. 26**



# KCC2/NT2-N

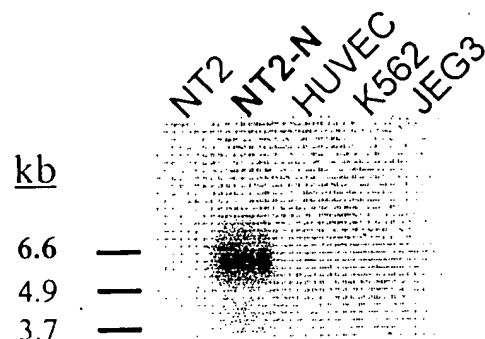


FIG. 27A

# Mouse KCC3

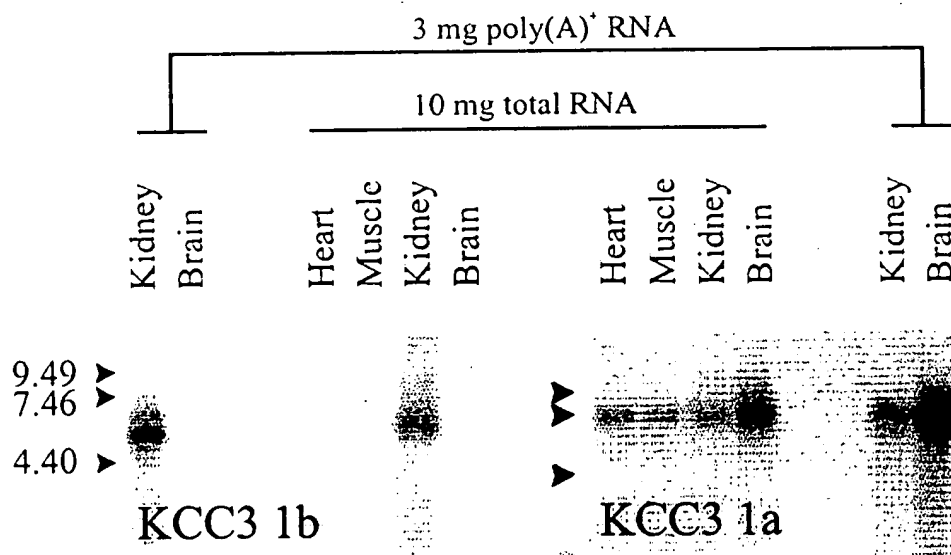


FIG. 27B

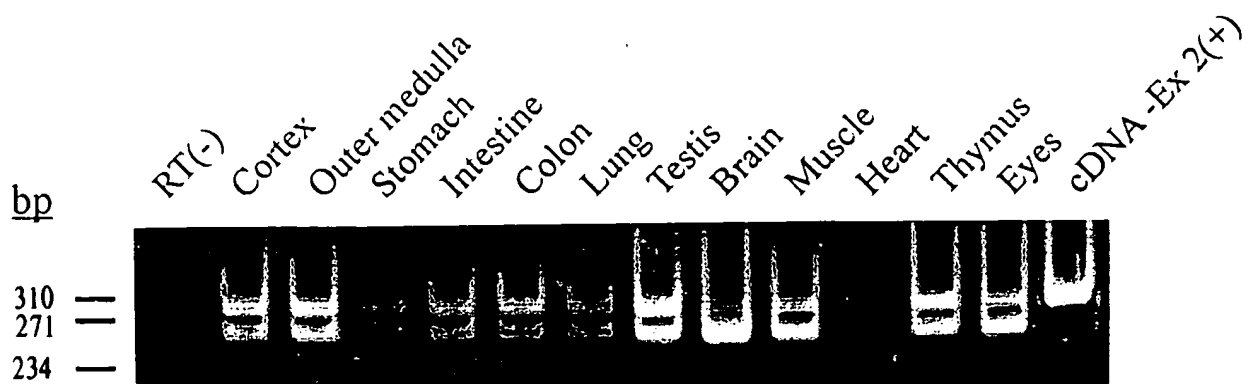


FIG. 27C

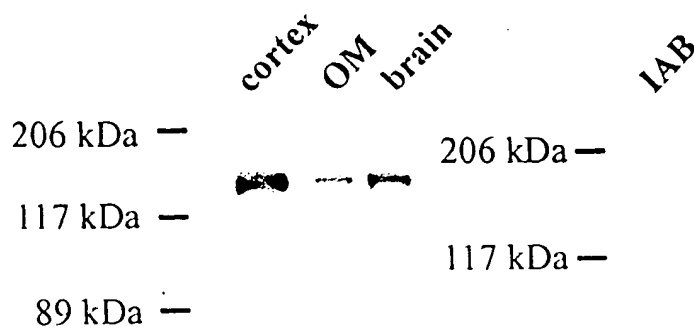


FIG. 27D

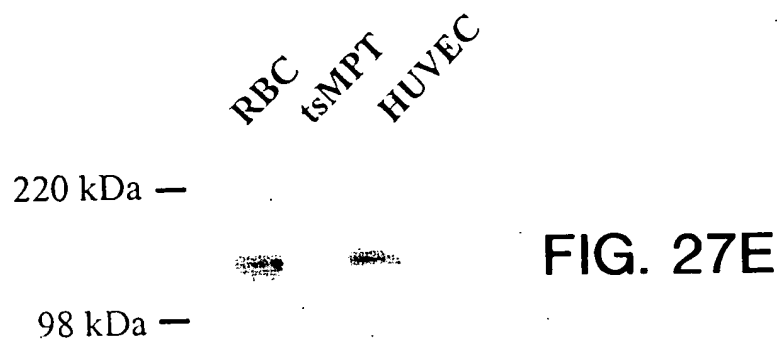


FIG. 27E

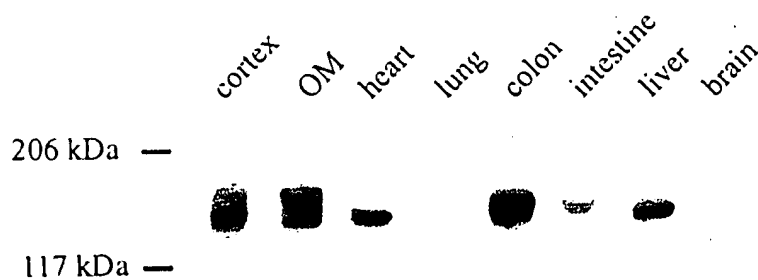


FIG. 27F

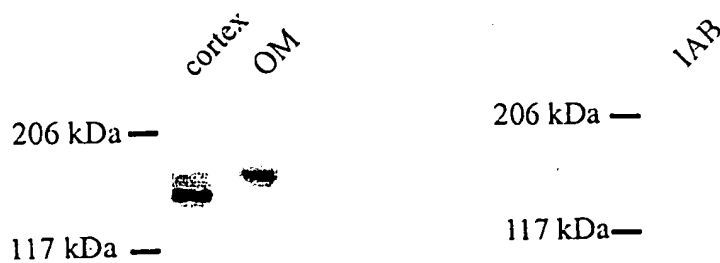


FIG. 27G

FIG. 27H

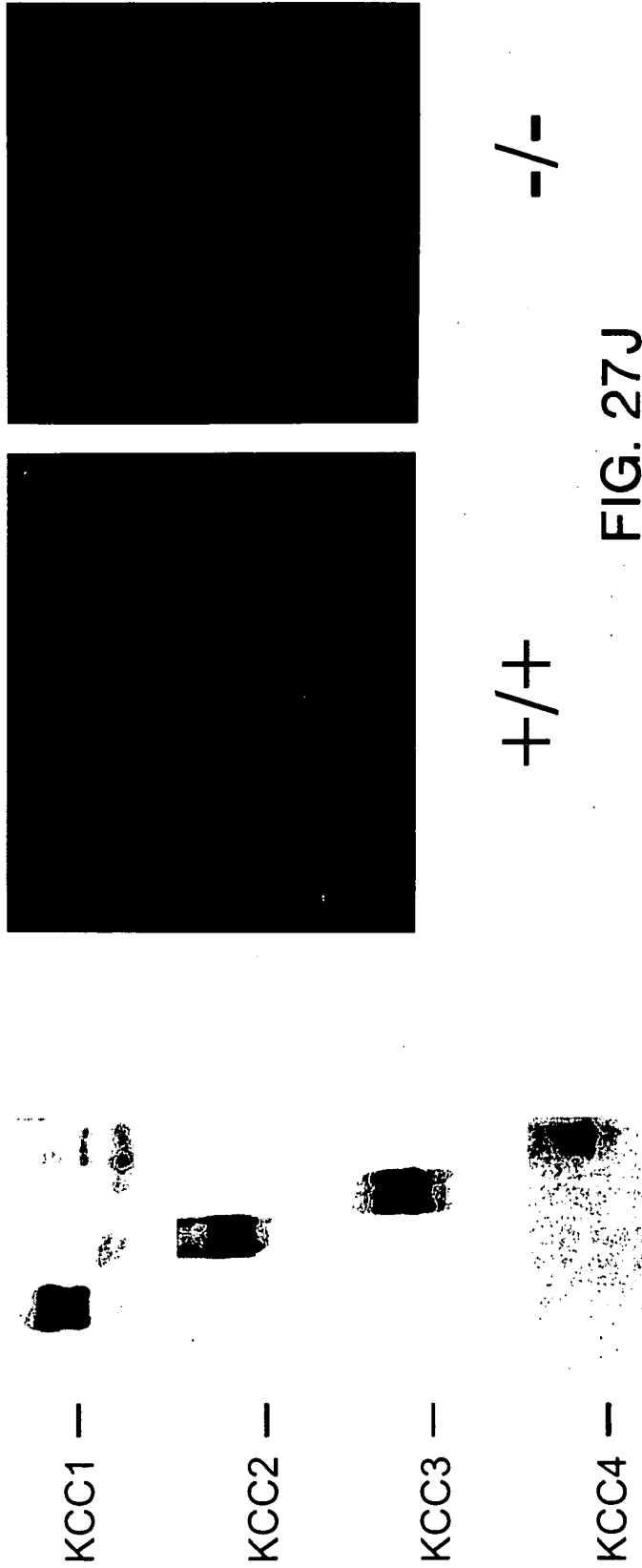


FIG. 27I

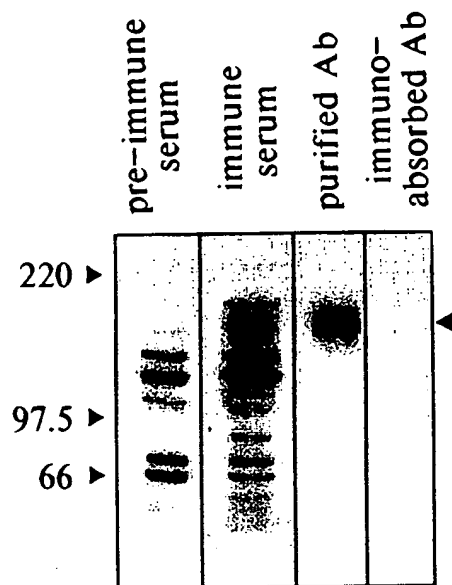


FIG. 28

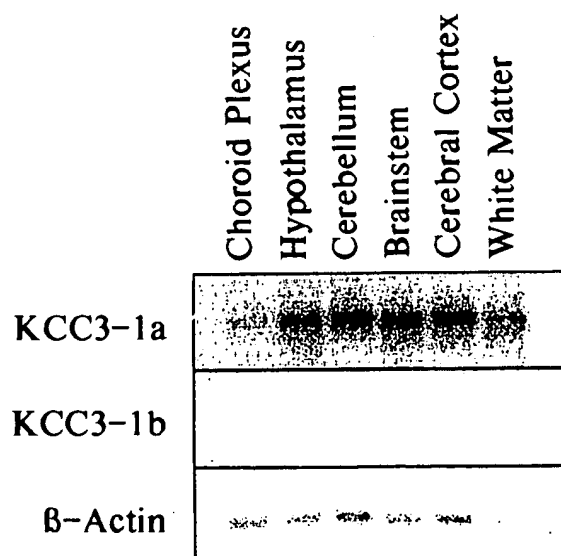


FIG. 29

FIG. 30A

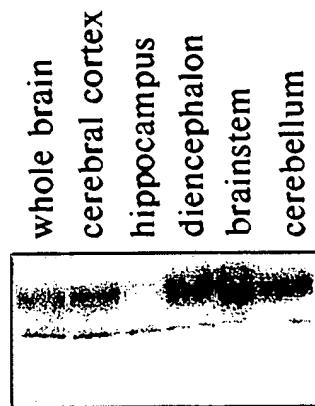


FIG. 30B

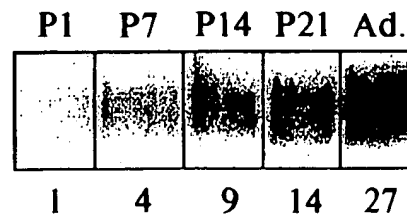
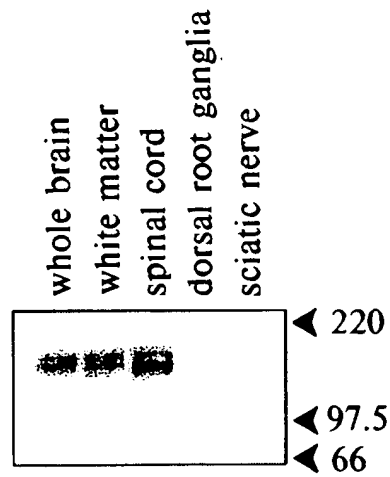


FIG. 30C

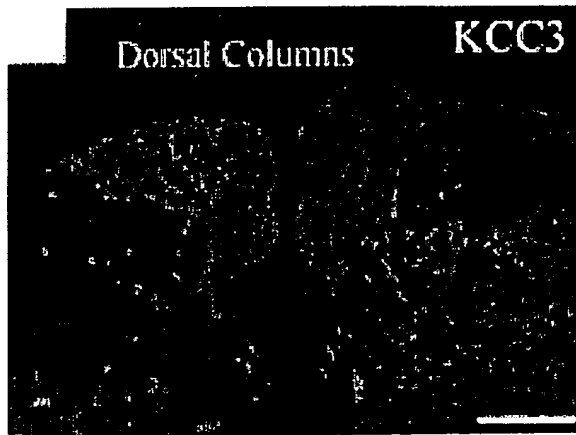


FIG. 31A

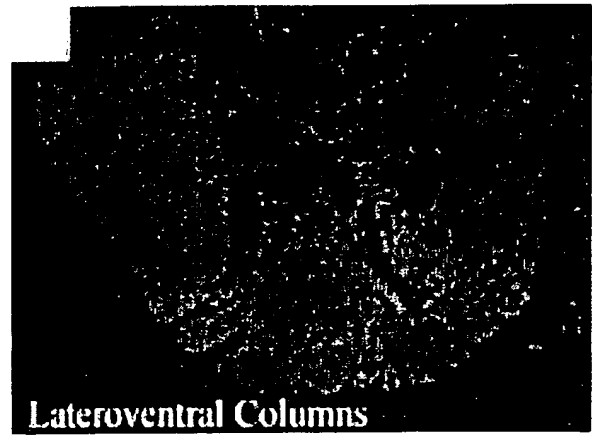


FIG. 31D

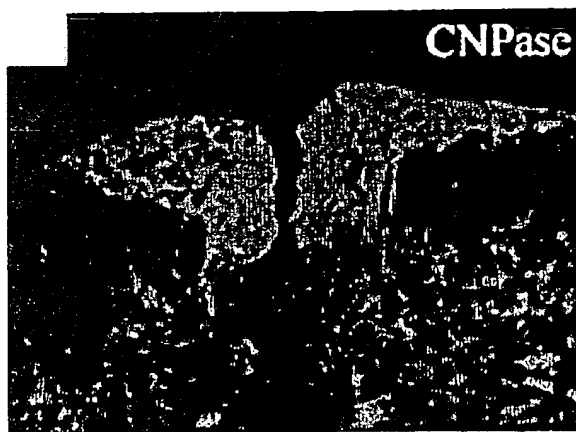


FIG. 31B



FIG. 31E



FIG. 31C

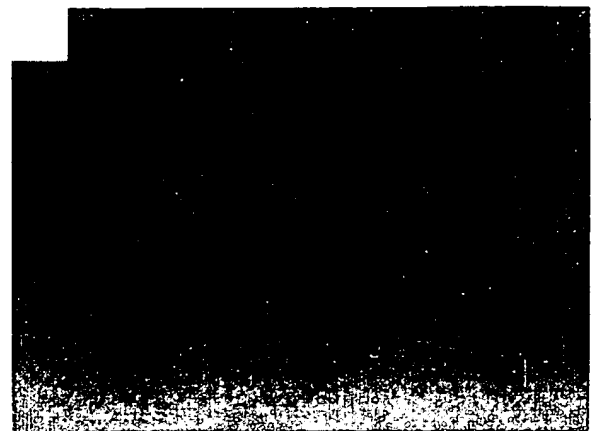


FIG. 31F

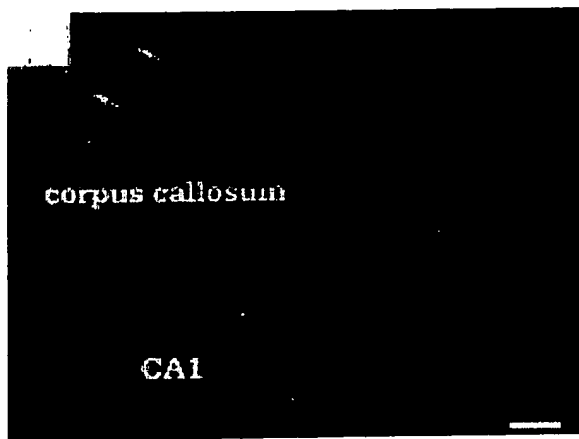


FIG. 32A

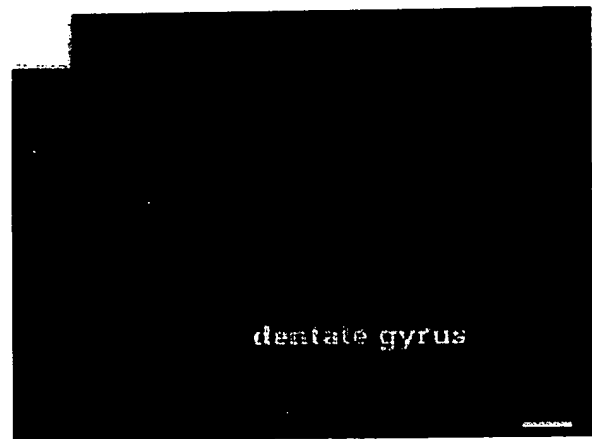


FIG. 32D

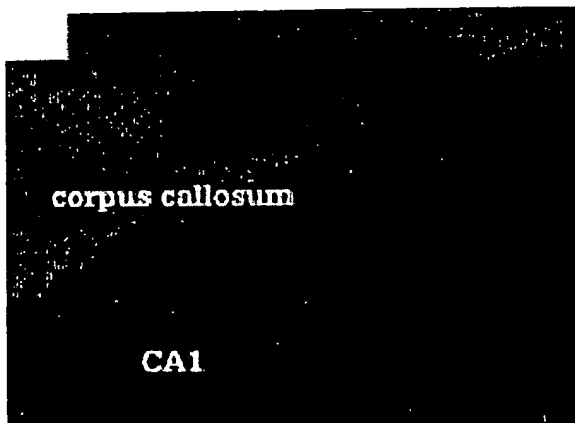


FIG. 32B



FIG. 32E

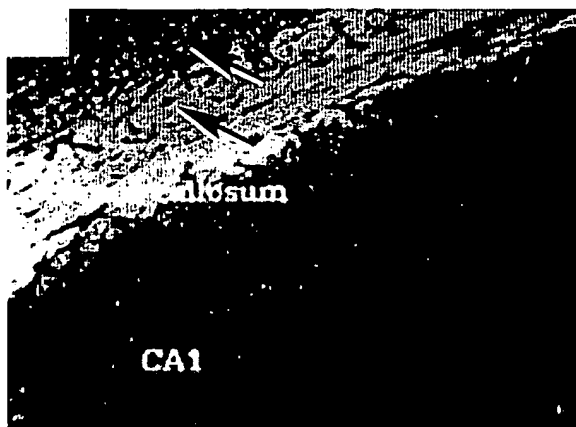


FIG. 32C

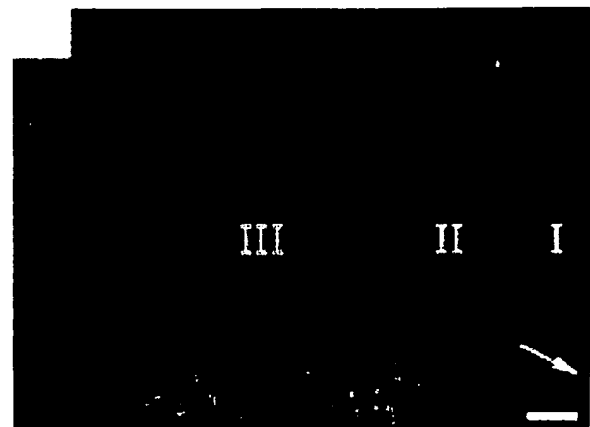
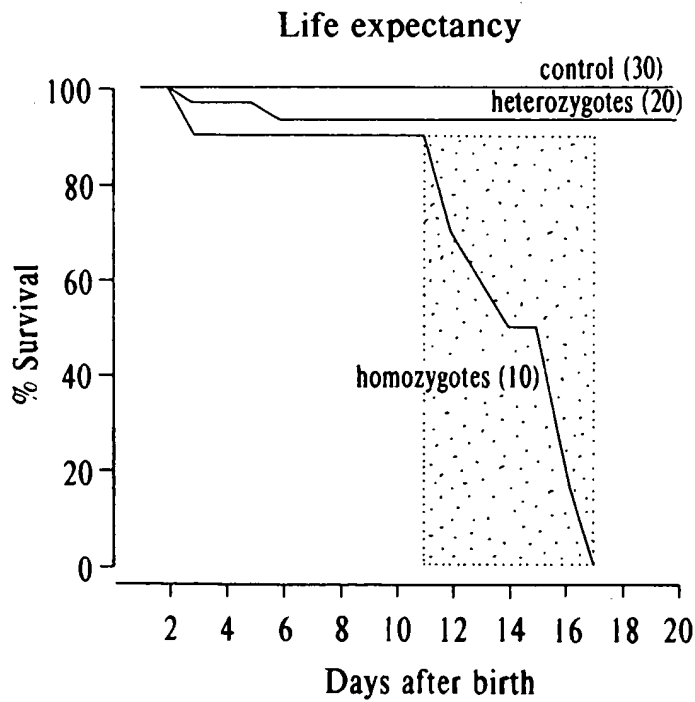
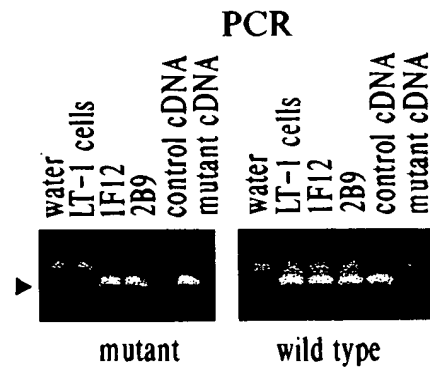
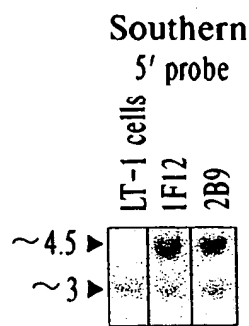
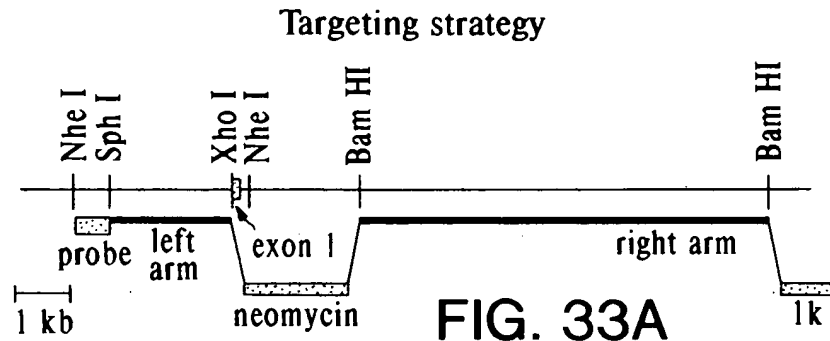
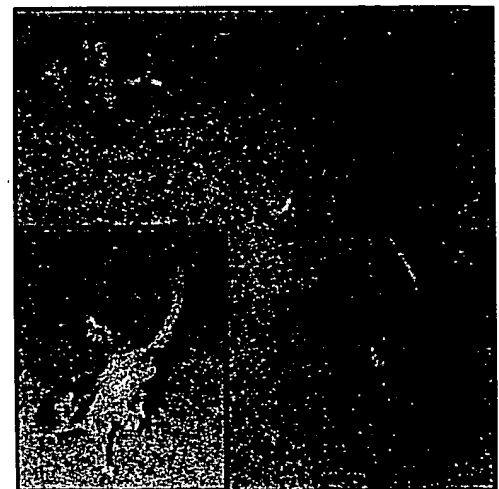


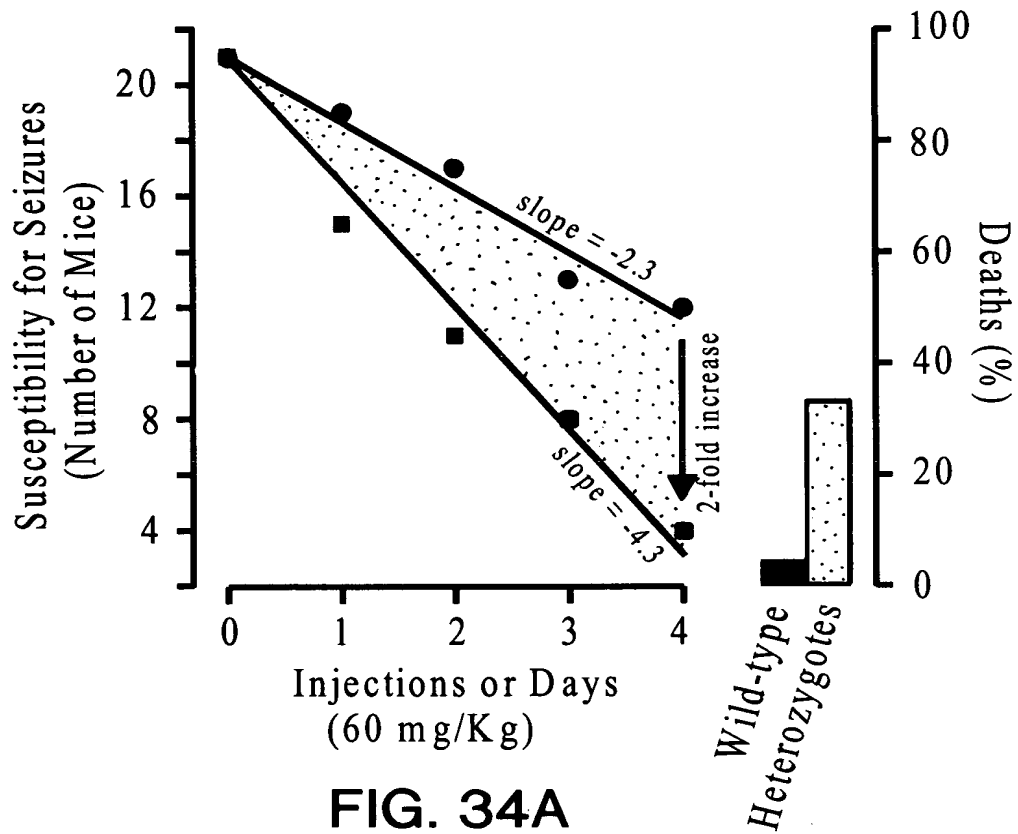
FIG. 32F



**Seizure disorder**







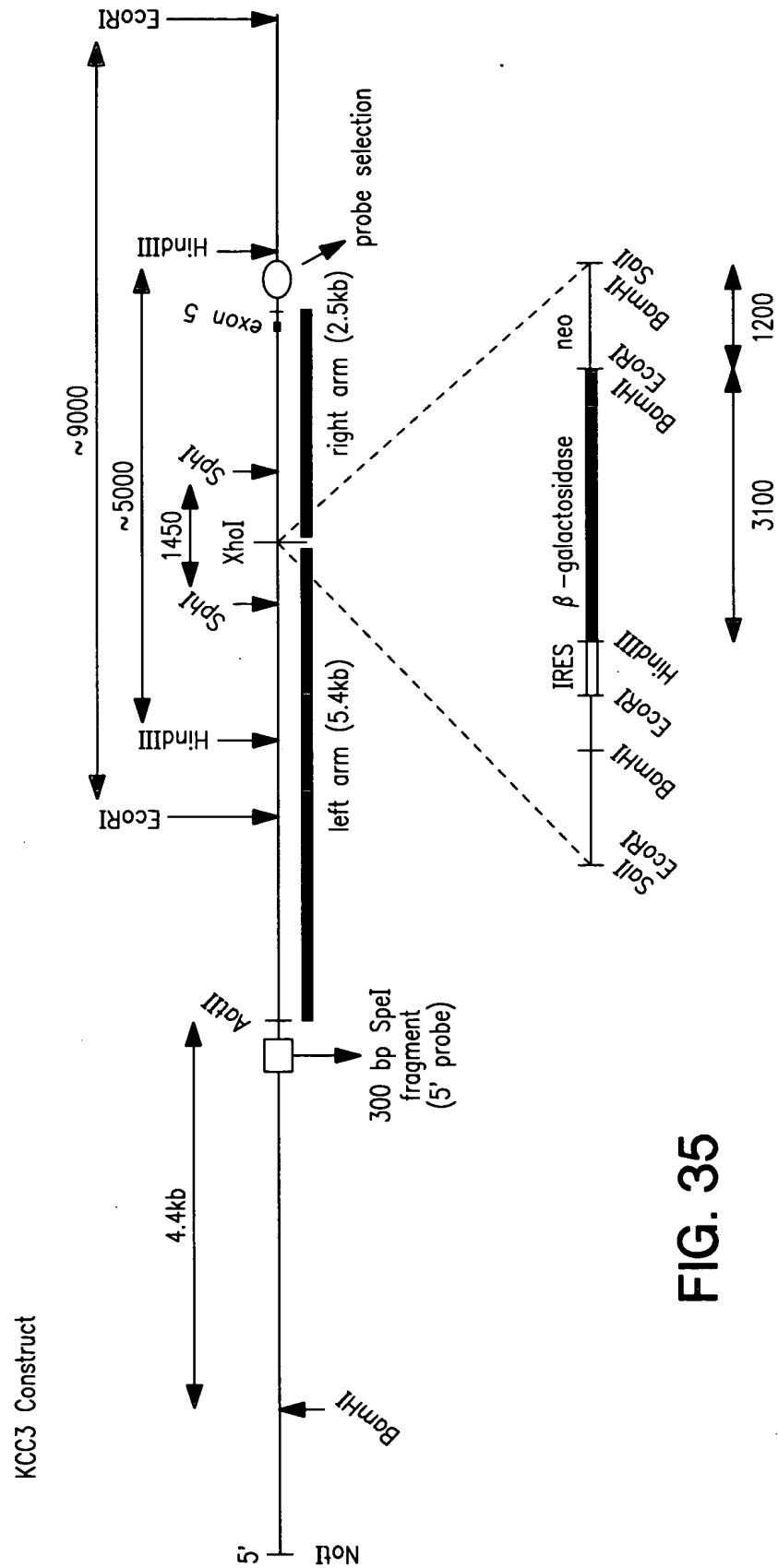


FIG. 35

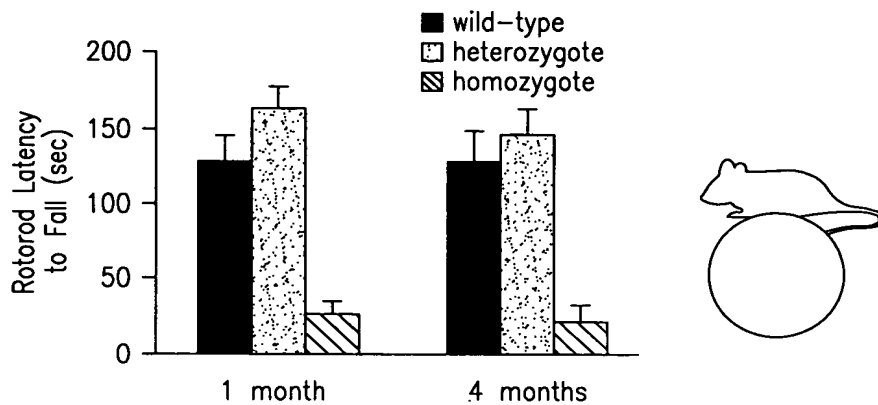


FIG. 36A

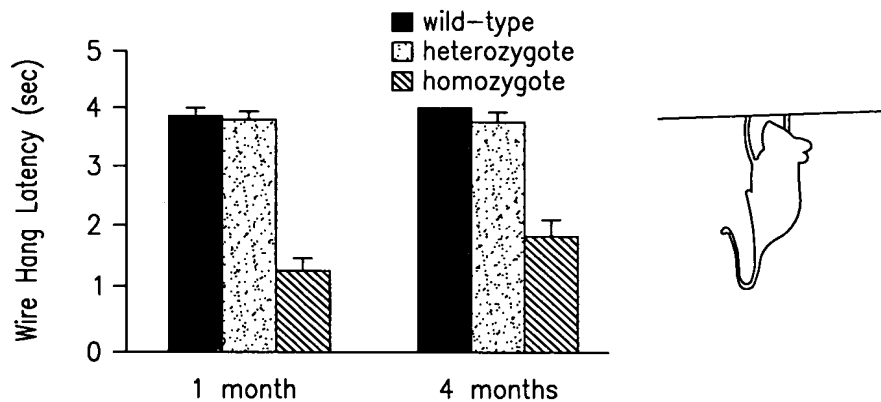


FIG. 36B

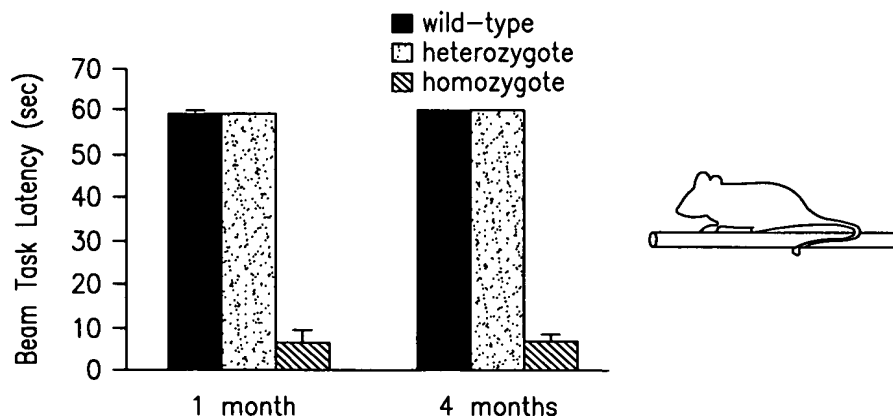
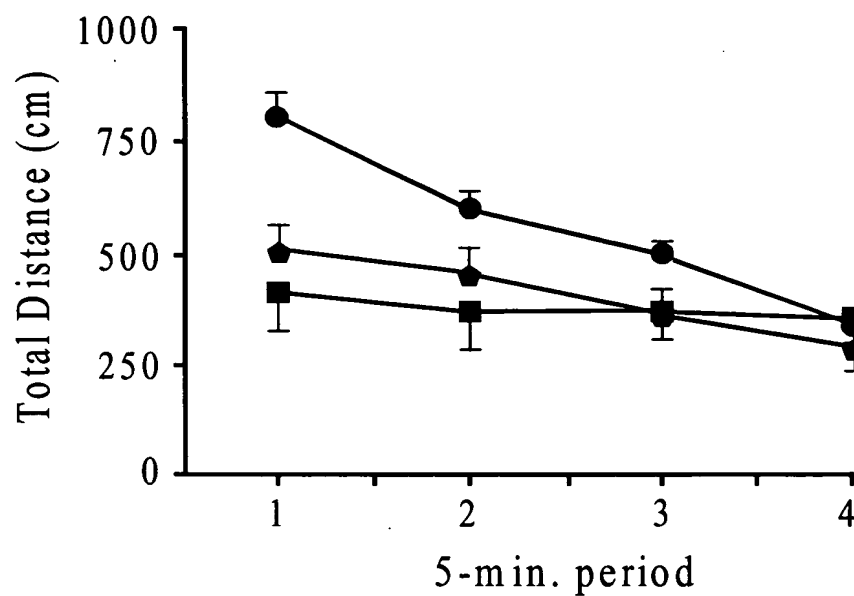
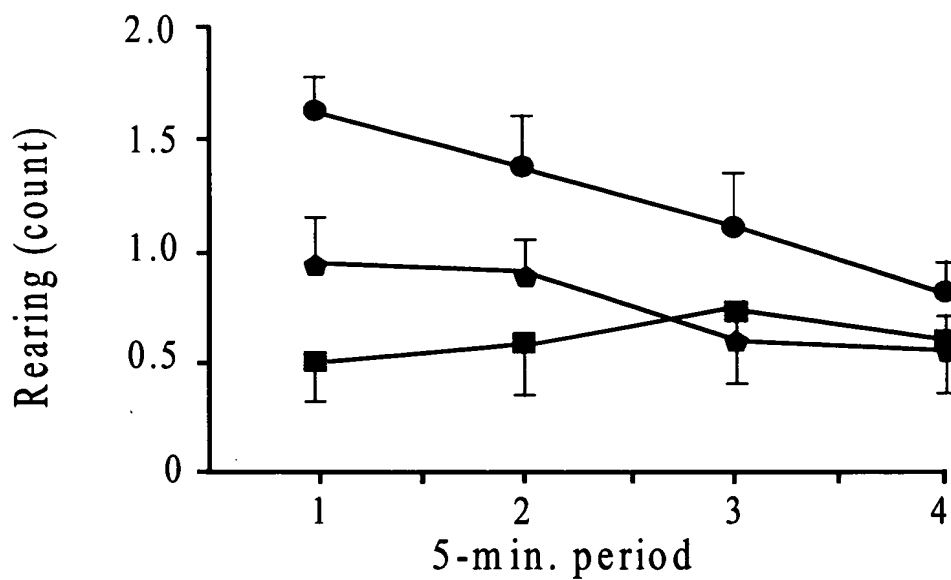


FIG. 36C



**FIG. 37A**



**FIG. 37B**

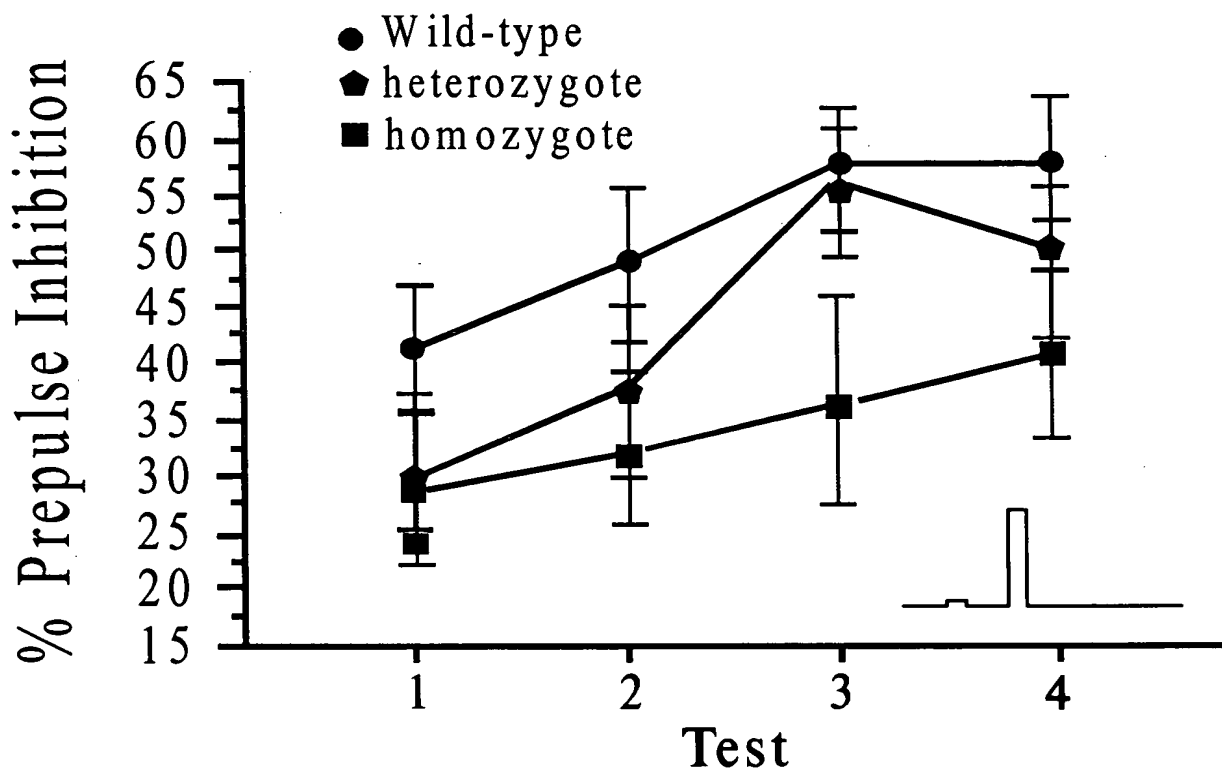


FIG. 38

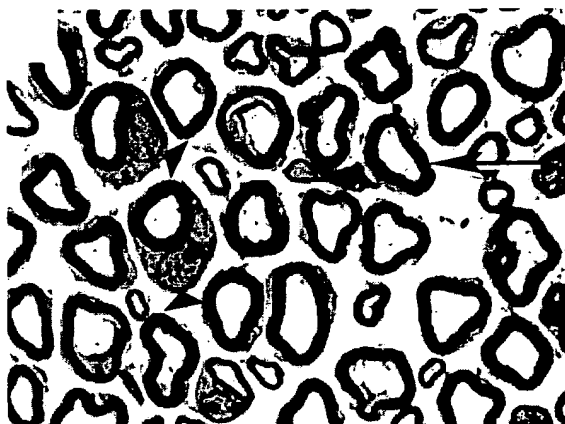


FIG. 39A

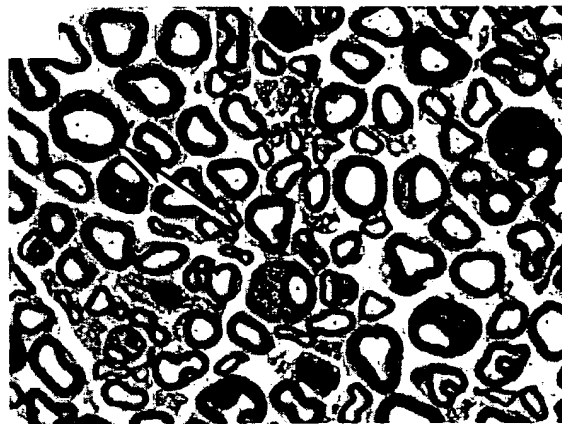


FIG. 39B

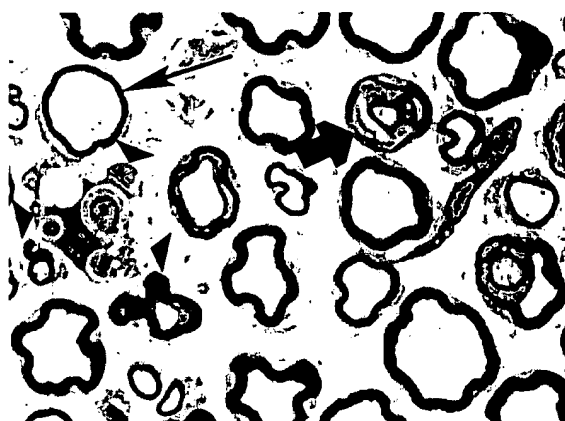


FIG. 39C



FIG. 39D

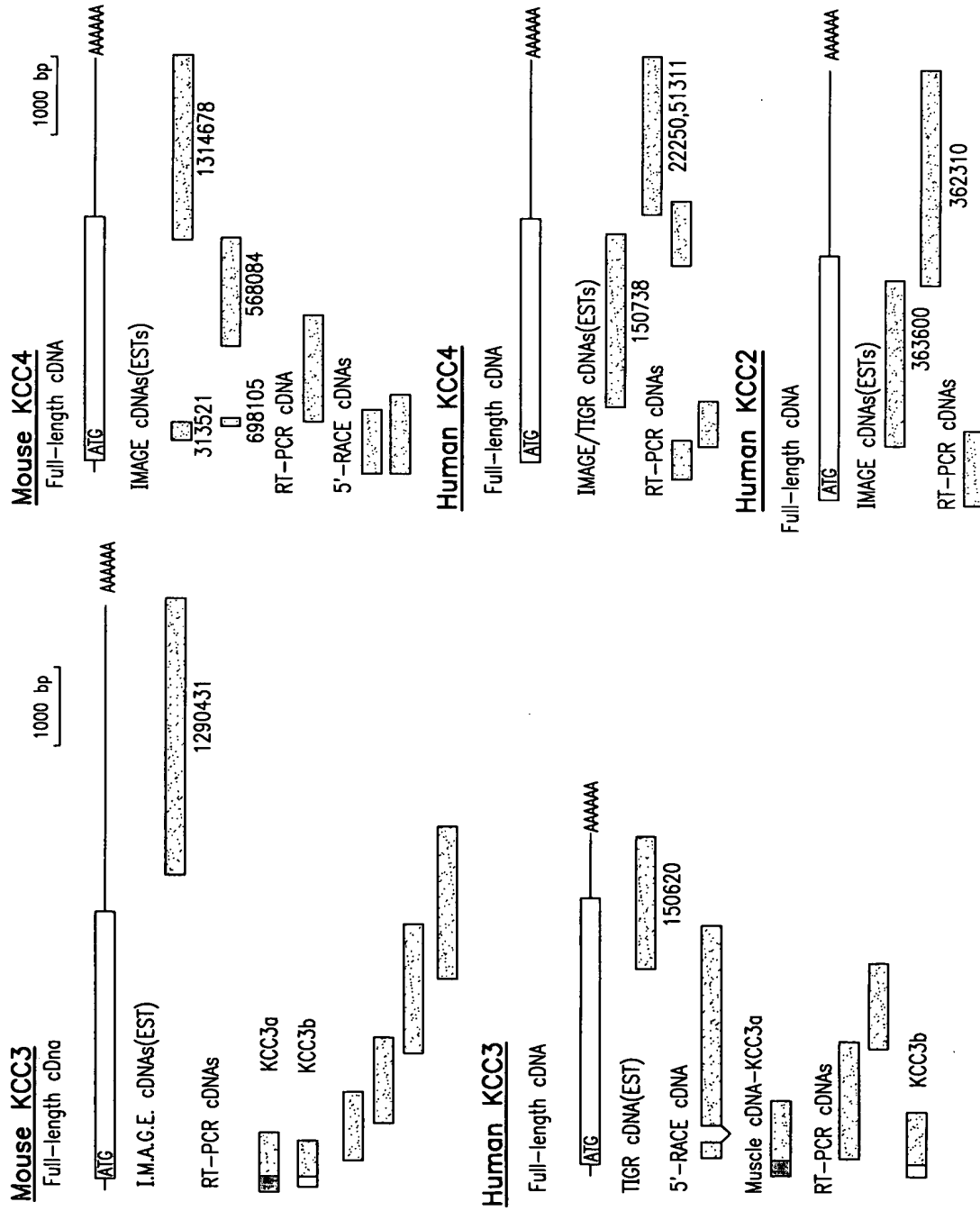
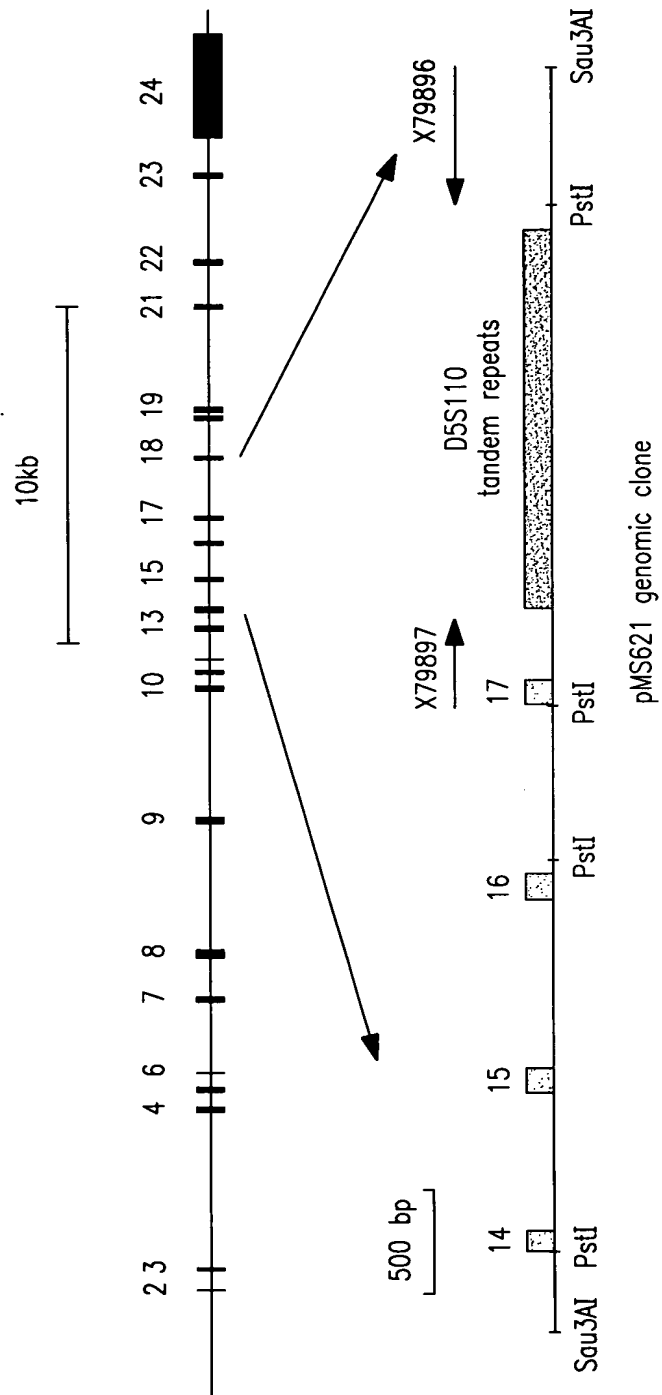
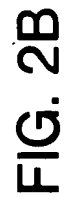
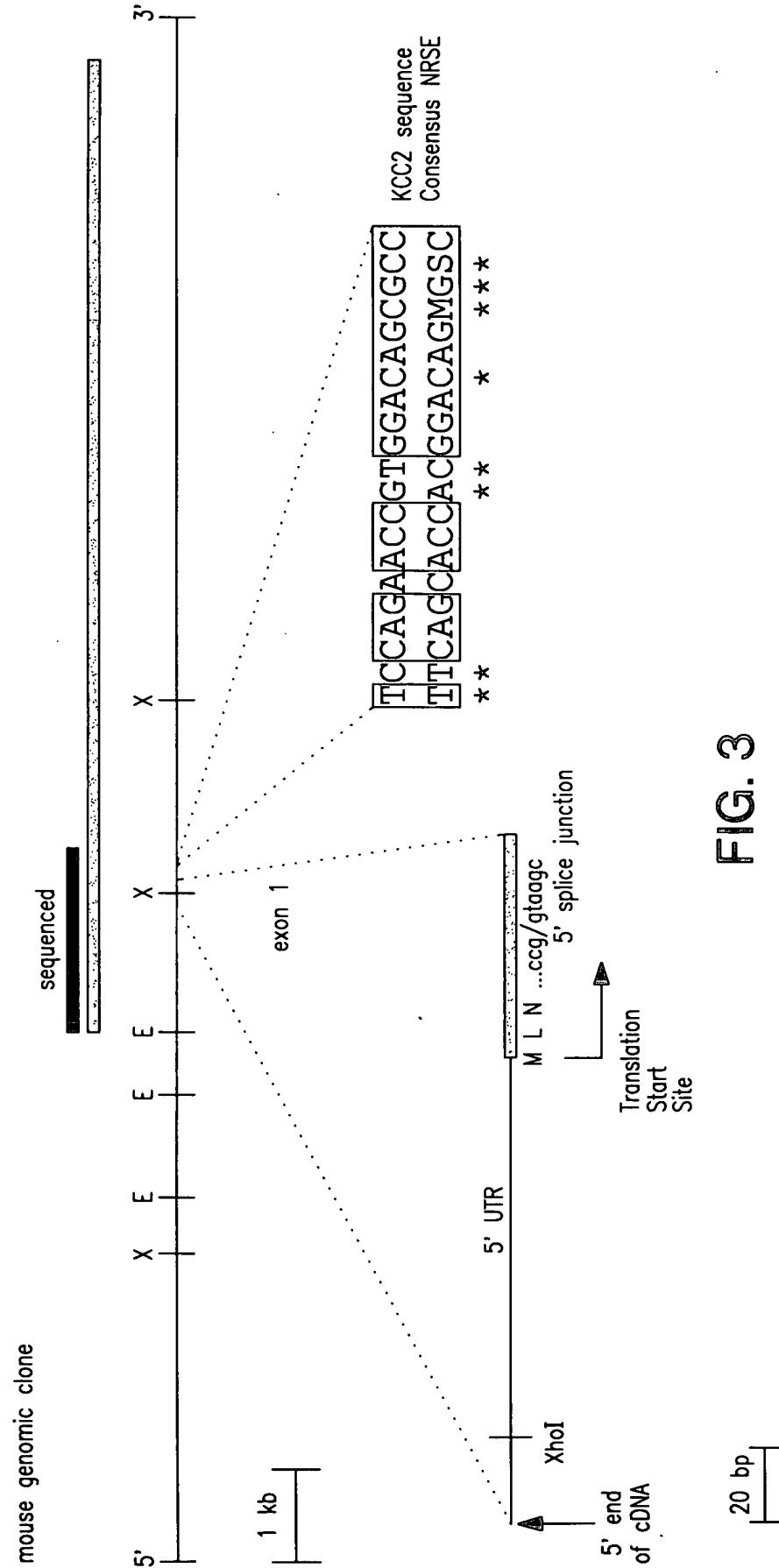


FIG. 1







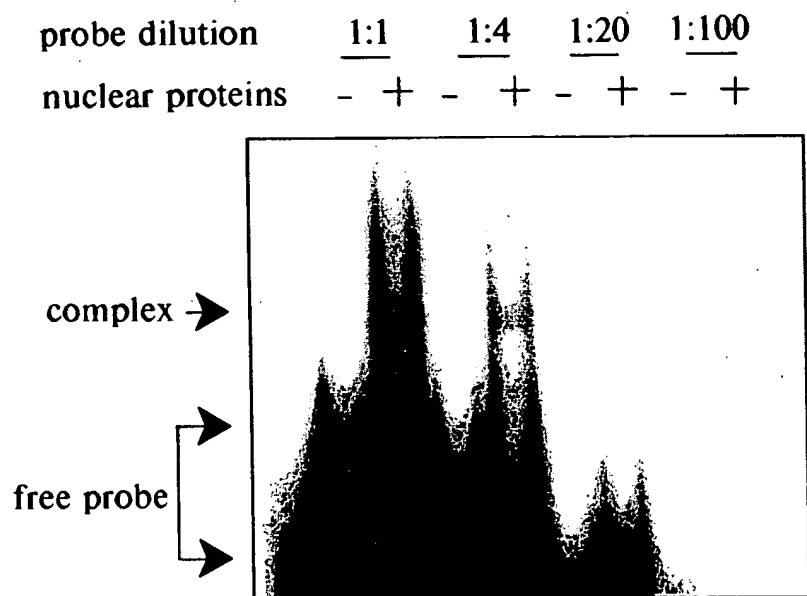


FIG. 4A

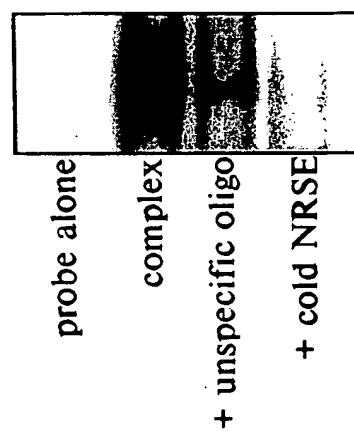


FIG. 4B

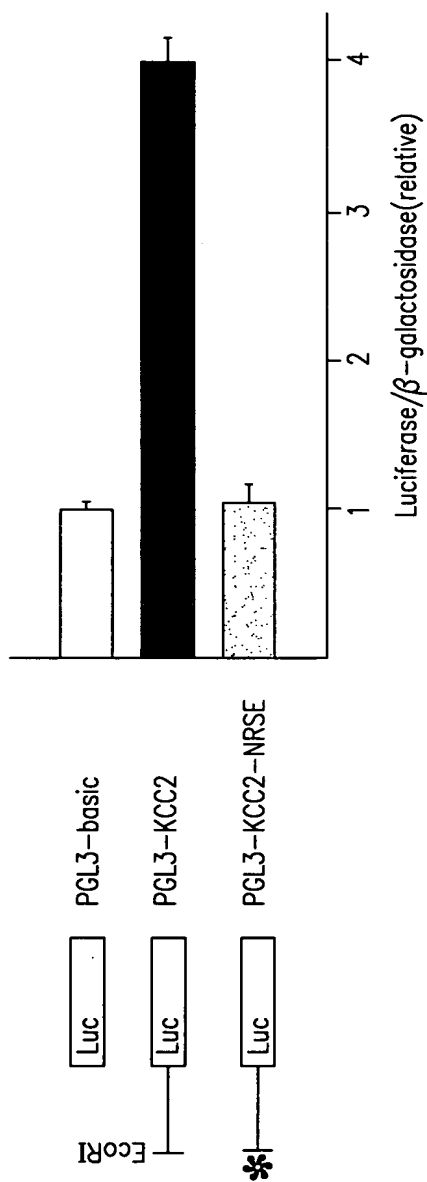


FIG. 5

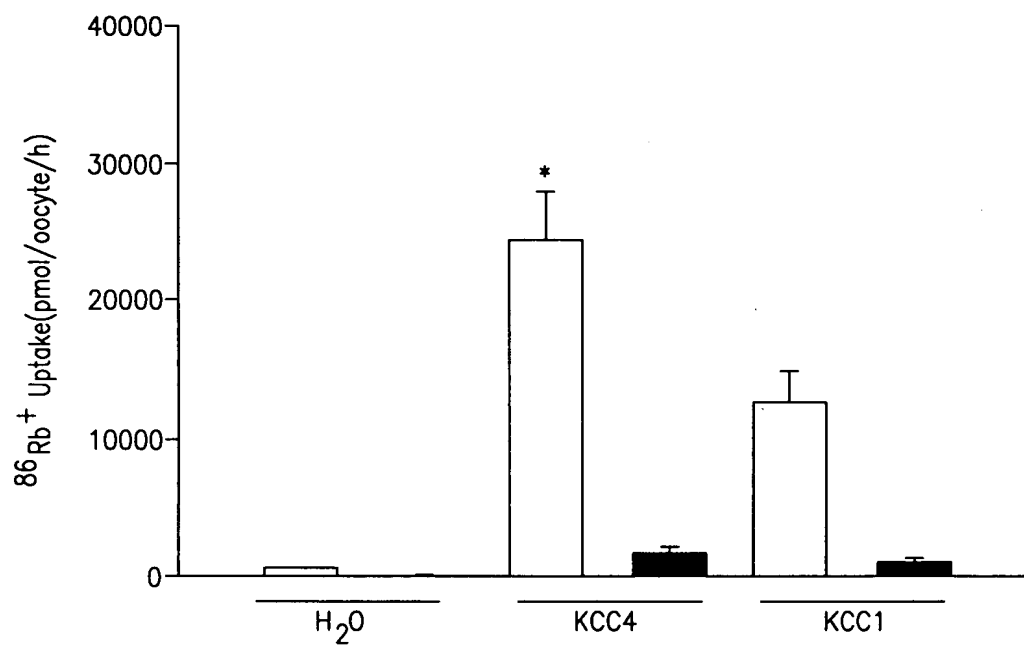
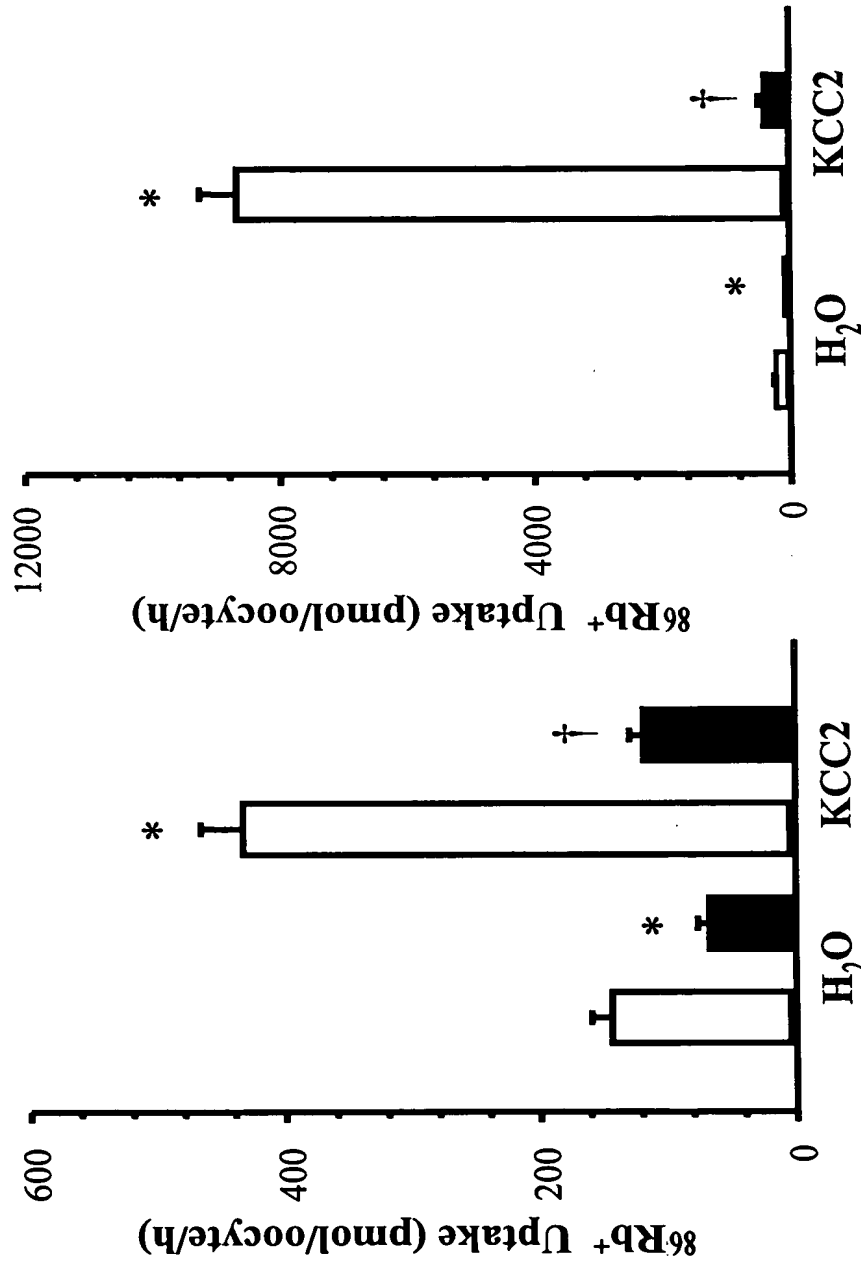


FIG. 6



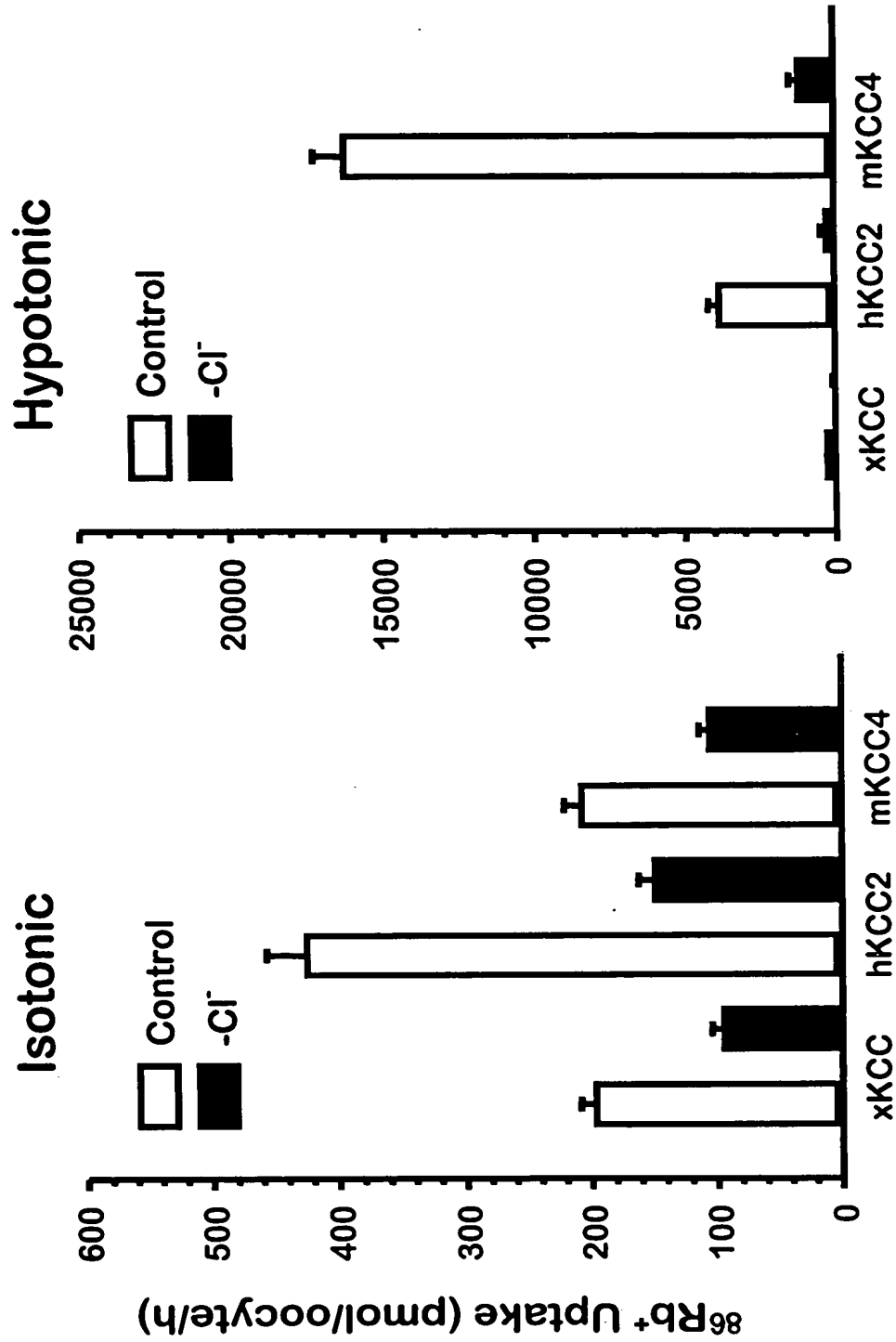


FIG. 8

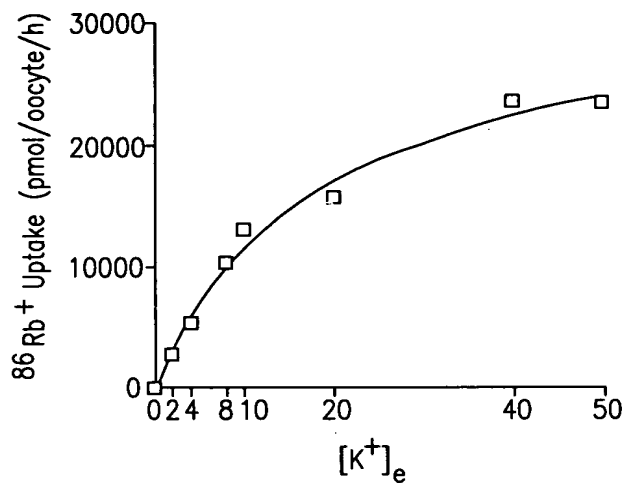


FIG. 9A

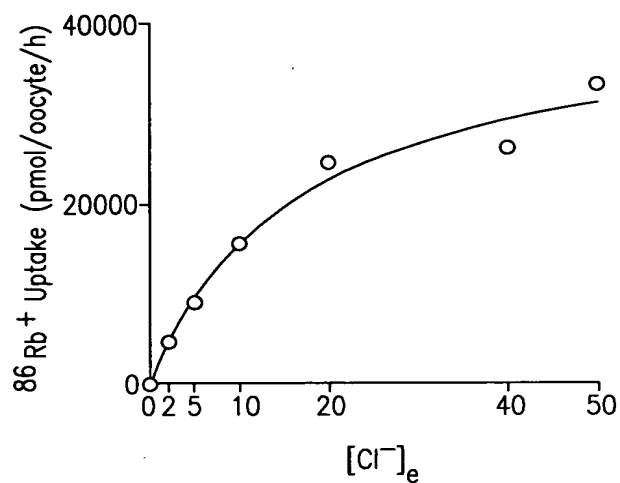


FIG. 9B

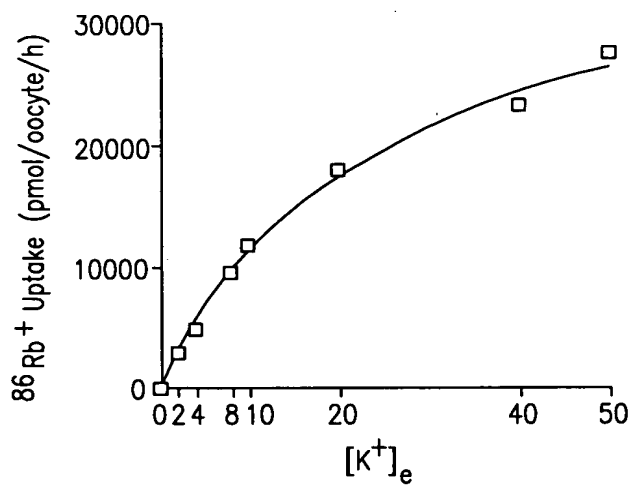


FIG. 9C

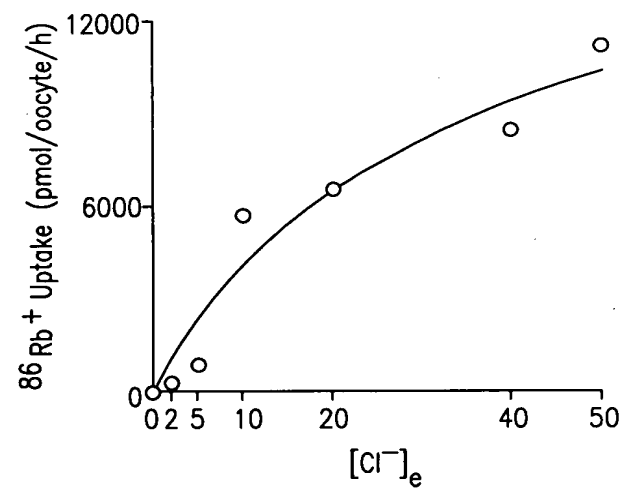


FIG. 9D

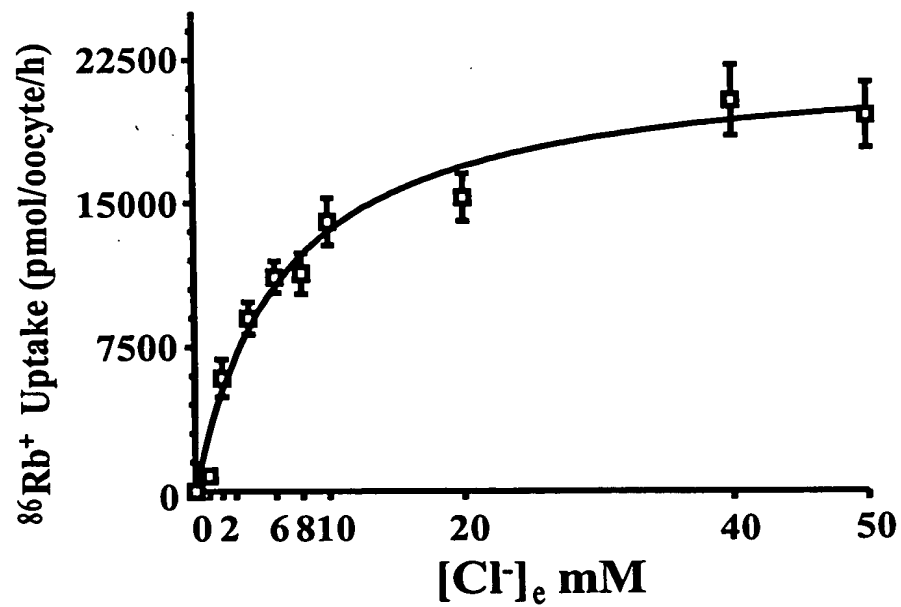
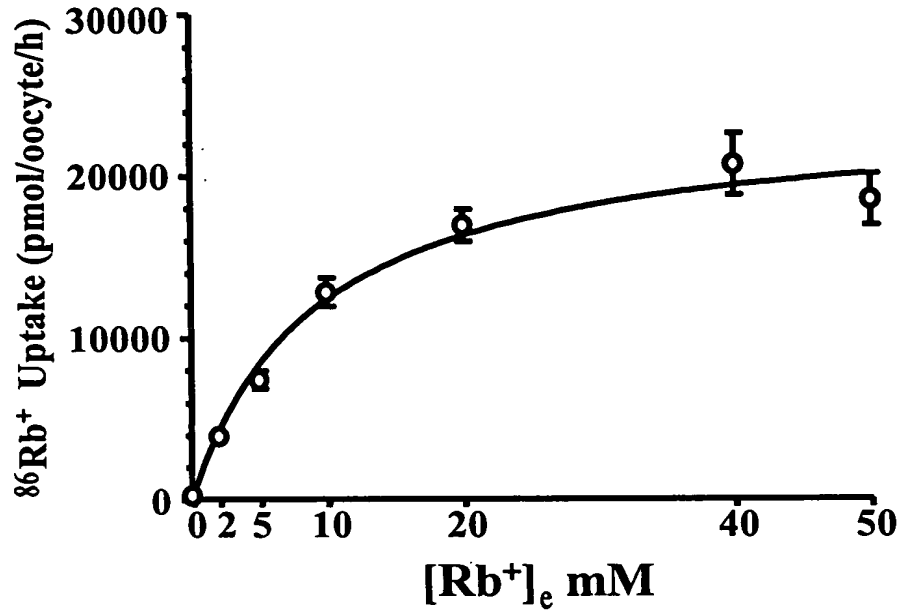


FIG. 10



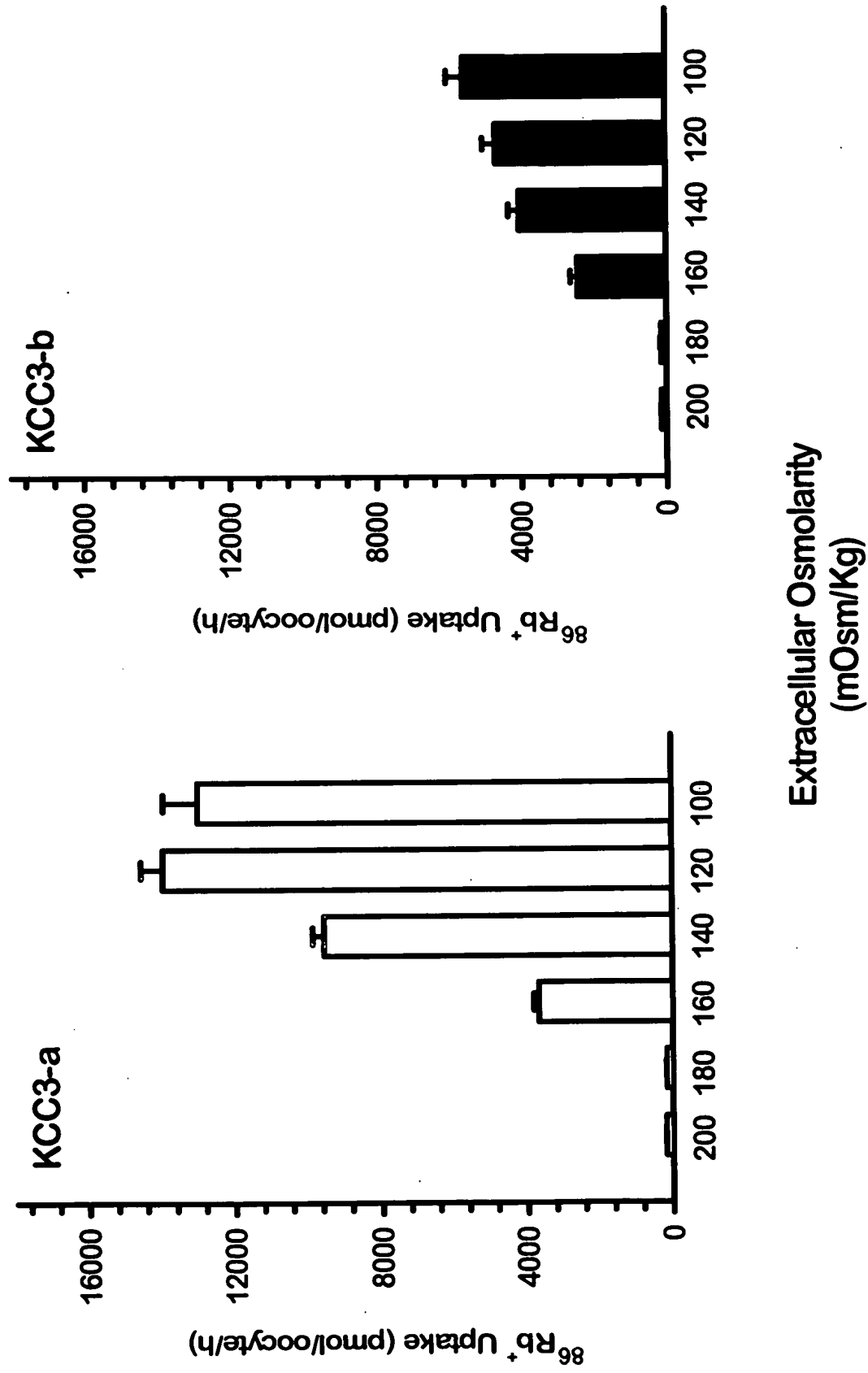


FIG. 11

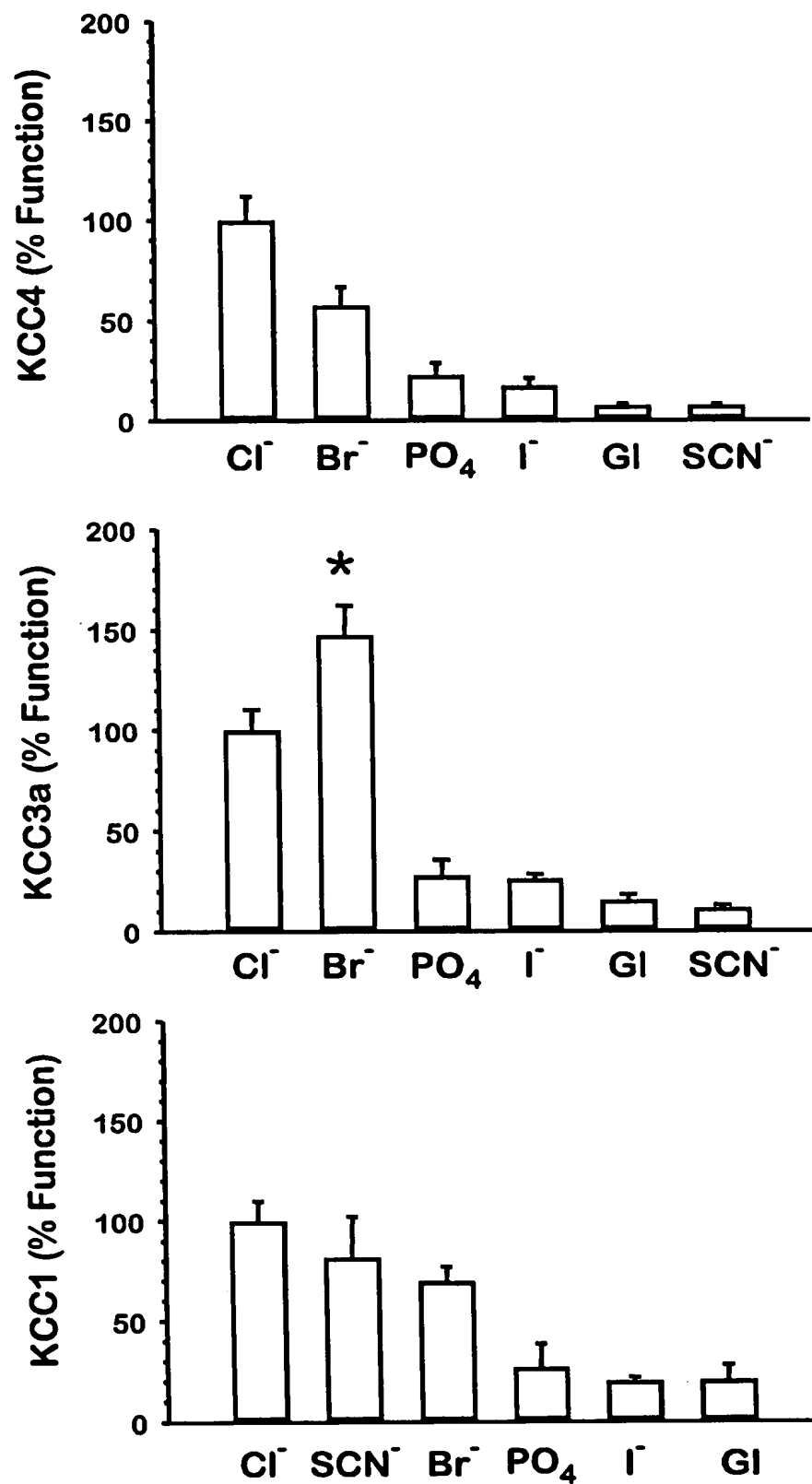


FIG. 12

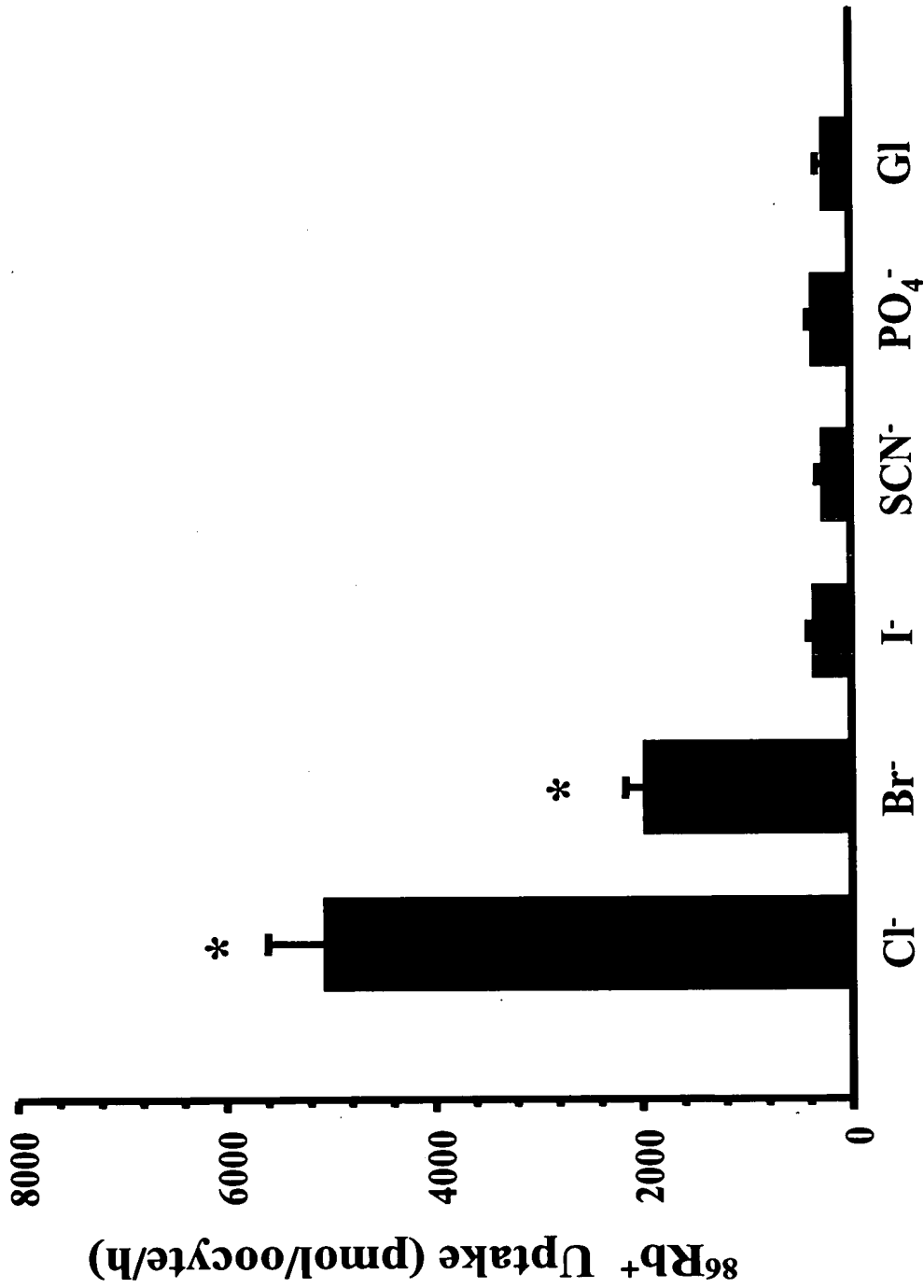


FIG. 13